# MISSOURI SOUTHERN COLLEGE



SPIVA LIBRARY

ANNUAL CATALOG 1967-1968

- Public, co-educational, unique organizational structure
- Outstanding teaching faculty
- Focus interest on student
- Advising and counseling services
- Accent excellence and rigor in all programs
- "Open door" admission for Missouri residents
- Certificate, Associate Degree, Bachelor's Degree Programs

This catalogue is a description and official register of Missouri Southern College, a two-year junior college and a two-year senior college.

In general, the catalogue may be considered a working agreement between student and college. A student will be permitted to graduate under the terms of the catalogue of the year in which he matriculates or of that year in which he plans to graduate, as he elects.

The college reserves the right to revise any provision or requirement at any time within the student's term of attendance when such revision seems advisable in the interest of the student and the total college program. The college may not be restricted from amending any regulations when it deems necessary. The student is responsible for being aware of and fulfilling all conditions set forth in this catalogue.

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# MISSOURI SOUTHERN COLLEGE

JOPLIN, MISSOURI

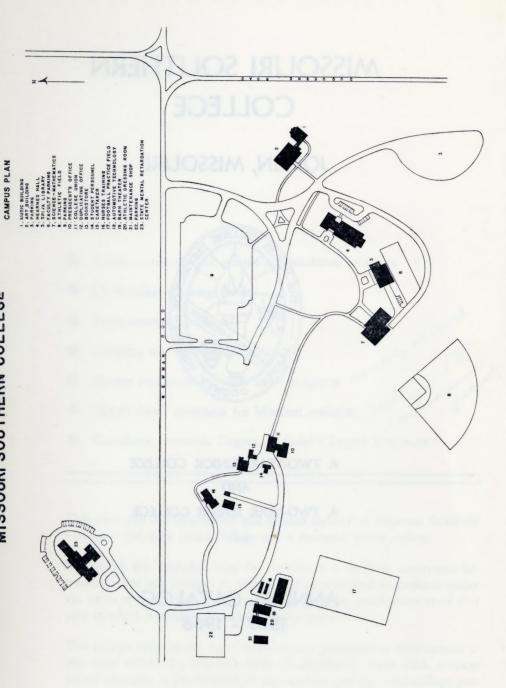


A TWO-YEAR JUNIOR COLLEGE

AND

A TWO-YEAR SENIOR COLLEGE

ANNUAL CATALOG 1967 - 1968



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## COLLEGE CALENDAR 1967-1968

# MISSOURI SOUTHERN COLLEGE THE JUNIOR COLLEGE DISTRICT OF JASPER COUNTY

1967-1968

#### **BOARD OF REGENTS**

Fred Hughes, President 1970
Thomas E. Taylor, Vice-President 1969
\*Elvin Ummel, Secretary
\*Gene Taylor, Treasurer
Mills H. Anderson 1971
Norval M. Matthews 1967
L. R. Reynolds, Jr. 1968

#### **BOARD OF TRUSTEES**

Fred Hughes, President 1970
Gene Taylor, Vice-President 1972
Norval M. Matthews, Secretary 1968
\*Mills H. Anderson, Treasurer
L. R. Reynolds, Jr. 1968
Thomas E. Taylor 1970
Elvin Ummel 1972

\* Appointed by respective boards

#### GENERAL ADMINSTRATION

#### DIVISION CHAIRMEN

DIVISION CHAIRMEN				
James J. Altendorf				
Ervin J. Dunham				
Harry C. Gockel Social Sciences A. B., A. M., Washington University; M. S., University of Wisconsin				
L. Keith Larimore				
James K. Maupin				
State College of Pittsburg  Charles F. Niess				
STUDENT PERSONNEL OFFICERS				
(Position to be Filled)				
Floyd E. Belk				
Oklahoma State University  Margaret Mitchell				
B. S., M. A., Ed. D., Oklahoma State University				
Dudley F. Stegge				
George H. Volmert				
Douglas Landrith				
LIBRARIANS				
Mrs. Loretta Frazier Librarian B. S., Northwest Missouri State College; B. S. in Library Science, University of Illinois Mrs. Cora Ditto Assistant Librarian B. S., Kansas State College of Pittsburg: M. S., K. S. T. C.				
Mrs. Cora Ditto				

## **FACULTY**

James J. Altendorf
V. L. Anderson
Floyd E. Belk
Marie Bickett
David C. Bingman
M. Jane Blades
Mrs. Enid Blevins
Arhur Boles
Milton W. Brietzke Assistant Professor of Speech and Drama A. B., San Jose State College; M. A., Western Reserve University
C. E. Cowan
Darral A. Dishman
B. S., M. A., Ed. D., Oklahoma State University
Ervin J. Dunham
Larry D. Dunham
John G. Eli
Mrs. Barbara N. Frizzell

- Forrest D. Kellogg ...... Assistant Professor of Sociology and Philosophy A. B., Simpson College; (Course work complete for Ph. D., University of Missouri)

Douglas Landrith ...... Instructor of Physical Education B. S., M. S., Kansas State College of Pittsburg L. Keith Larimore ....... Assistant Professor of Business and Economics B. S. B. A., Kansas State College of Pittsburg; M. B. A., University of Oklahoma; (Candidate for Ph. D., University of Arkansas) J. Larry Martin ...... Instructor of Mathematics B. S., M. S., The University of Tulsa Dwight E. Mason ...... Instructor of Automotive Technology B. S., Oklahoma State University Martha Ann McCormick ...... Assistant Professor of Mathematics Ph. B., A. M., University of Chicago Mrs. Lorine Miner ...... Instructor of Business B. S., M. S., Kansas State College of Pittsburg Mrs. Grace Clayton Mitchell .. Assistant Professor of English and Speech A. B., Greensboro College; M. A., Pennsylvania State University Charles F. Niess ...... Associate Professor of Education and Psychology B. S., M. S., Central Missouri State College; Ed. D., Colorado State College Orty E. Orr ...... Associate Professor of Biology B. S., Kansas State College of Pittsburg; M. S., Ph. D., Oklahoma State University Eula Ratekin ....... Assistant Professor of Chemistry A. B., A. M., University of Missouri Gail K. Renner ...... Instructor of Political Sciences B. S., Southwest Missouri State College; M. A., University of Missouri, Kansas City; M. A., University of Missouri, Columbia Alfred H. Rogers ...... Instructor of History B. S., M. A., Kansas State College of Pittsburg; M. A., University of Missouri, Columbia Mrs. Jenean Sears, R.N. ..... Instructor of Nursing B. S. N., University of Kansas Mrs. Bobbie Z. Short ...... Instructor of English and Speech B. S., Southwest Missouri State College; M. S., Kansas State

College of Pittsburg

Kansas

Oliver Sovereign
Mrs. Lillian Spangler Assistant Professor of Foreign Languages A. B., A. M., University of Missouri
Sam J. Starkey Assistant Professor of Education and Psyschology B. S., M. E., University of Arkansas
Mrs. Annetta St. Clair
Dudley F. Stegge
Dorothy Stone
Arthur L. Strobel
Ronald Toman
Mrs. Ima J. Van Natter
Mrs. Bessie Vediz, R.N
Mrs. Ruby A. Wiley
Venus Yount

# DIRECTION FOR CORRESPONDENCE MISSOURI SOUTHERN COLLEGE

# Newman and Duquesne Roads Joplin, Missouri 64801

Admissions of students
Alumni affairs Director of Alumni Relations
Athletic activities
Business affairs and purchases
Catalog and bulletins Director of Admissions
Credit evaluation and transcripts
Employment (student part-time) Dean of Students
Evening School
Faculty appointments Dean of College
Gifts and annuities
Housing Dean of Students
Loans Dean of Semi-Professional and Technical Education
Orientation
Public Events and Calendar Dean of Students
Scholarships, Aids and Awards Chairman of Aids and Awards
Student Organizations Dean of Students
Summer Session
Testing and Counseling Director of Guidance and Counseling
Veterans affairs

# GENERAL INFORMATION

#### THE COMMUNITY AND SERVICE AREA

Missouri Southern College is situated in Southwest Missouri, three miles from the Kansas state line, 40 miles from the Arkansas border, and 15 miles from Oklahoma. In this southwest part of Missouri lies a nine-county area comprising approximately 200,000 people.

The campus, located at the northeast edge of Joplin on 230 acres of gently rolling land, is within commuting distance of a large college population. Joplin, a city of 43,000, is the hub of a four-state area with its network of east-west and north-south major highways and good air transportation schedules. Known in the early 1900's as an area of diversified agricultural activities and lead and zinc mining, it is even better known today as a rapidly growing industrial and service center. It is within easy driving distance of the Ozarks, one of the great recreational areas of the United States. Cultural activities, educational programs from kindergarten to college, and beautiful churches for all faiths are ideal for a college setting.

#### HISTORY

Missouri Southern College, supported by the Junior College District of Jasper County, had its beginning in 1937 as a part of the Joplin Public School System. The first year of operation, classes were conducted in the Joplin Senior High School building functioning through the Extension Division of the University of Missouri.

On September 6, 1938, the College moved into its own building at Fourth Street and Byers Avenue and offered a full two-year college transfer program. Franklin Technical School (13th and Pearl Streets) dedicated March 21, 1948, provided college-level technical programs for students who wanted to prepare themselves for a job at the end of two years. In 1958, the College was moved to 310 West Eighth Street, a location used until the close of the 1966-1967 school year.

On April 7, 1964, County voters created the Junior College District of Jasper County and named a six-member Board of Trustees. After operating for 27 years as a part of the Joplin Public School System, the College became a separate entity, known as Jasper County Junior College encompassing all of Jasper County and parts of three other counties—Newton, Lawrence and Barton.

On July 22, 1965, the 73rd General Assembly of the Missouri Legislature passed House Bill No. 210 which provided for the establishment of a two-year state senior college in Jasper County, Missouri, when facilities of the Junior College District of Jasper County are made available. In anticipation of the possible passage of this legislation, the College Board of Trustees adopted the name Missouri Southern College, May, 1965.

The Bill provided for a five-member Board of Regents, appointed by the Governor, to assume the responsibility for the administration of the College. The appointments, made on October 13, 1965, mark the beginning of the operation of the College under the Board of Regents. The Board of Trustees, as directed by law, assumed the responsibility to levy a tax within the district which together with state junior college aid and funds available from other sources, will be sufficient to pay the costs of the operation of the junior college and costs of any capita limprovements for both the junior and senior college.

#### **COLLEGE PROFILE**

Missouri Southern College is a very unique institution that combines a two-year, locally supported junior college with a two-year, state supported senior college. The first two years are supported by The Junior College District of Jasper County, while the third and fourth years are state supported. The administration of all four years is vested in a five-member Board of Regents appointed by the Governor.

The unique organizational pattern of Missouri Southern College allows a great deal of flexibility. An open door comprehensive junior college that offers a liberal arts and pre-professional transfer program, terminal programs in technical education, and certificate programs is available for the first two years. The third and fourth years are designed for teacher education, business administration, and liberal arts programs. The faculty and administration of Missouri Southern serve both colleges.

#### PHILOSOPHY AND PURPOSES

Missouri Southern College is dedicated to the principle of developing a college community wherein all members shall be given the opportunity to learn, not only for the sake of learning, but for the purpose of revealing to the individual ways to live a better life. This principle will enable the individual to live a more responsible and productive life commensurate with his fullest potential.

Since higher education will benefit both the individual and the society of which he is a member, Missouri Southern College offers a diversity of study designed to satisfy a wide range of student interests. The College proposes to maintain the high quality of instruction at all levels which has been its tradition as a junior college.

Missouri Southern College shares a responsibility with other state colleges to serve any eligible student in the State of Missouri who may apply for admission. In addition, the College also recognizes its responsibility and obligation to the citizens of The Junior College District of Jasper County as it makes every effort to serve the needs of a community.

The College attempts to fulfill its obligation to both state and community by

providing a program of general education for all students;

preparing a student for professional and graduate programs of study;

preparing teachers for elementary and secondary schools;

preparing students for business, industry, and government; providing a variety of technical programs; serving as a center for adult education and community activities.

# **OBJECTIVES OF GENERAL EDUCATION**

Recognizing the limitations of undergraduate specialization, Missouri Southern College has developed a program of General Studies that offers the student an opportunity to open his mind to varied fields of knowledge thus producing an intellectually balanced individual with a foundation for continued learning. Specialization provides depth; general education provides breadth. The excitement of these experiences is shared by faculty and students of Missouri Southern College.

Within a carefully planned program of correlated materials in the traditional areas of learning, the student pursues a variety of studies. As he learns about himself, both as an individual and a member of society, and as he explores the world he inhabits, he is urged to adopt habits of individual thought. If the college stimulates intellectual curiosity and if the student learns to think effectively, both become potential contributors to the community and society.

Although it is difficult to state objectives of General Education in a detailed manner, some guidelines for the faculty to use in planning the curriculum are necessary. The selected courses, required of all students pursuing degree programs, should benefit the student in many ways. They should

> improve skills of communication and develop mathematical proproficiency;

> give an understanding of the leading intellectual ideas of western civilization, and appreciation of democratic heritage, and and responsibility as a citizen;

develop awareness and appreciation of the basic values in our cultural heritage, and aid in the development of creative and independent thought and expression;

provide knowledge and understanding concerning the physical universe;

provide experiences conducive to the development of strength of character and personality.

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#### ACCREDITATION

Missouri Southern College has been accredited by the North Central Association of Colleges and Secondary Schools as a junior college since 1949. Action for accreditation of the senior division by the North Central Association will be forthcoming at the annual meeting in April, 1967. The College is also accredited by the State Department of Education.

Missouri Southern College maintains membership in the American Association of Junior Colleges and the Council of North Central Junior Colleges.

#### THE CAMPUS

Missouri Southern College is located on a beautifully landscaped, spacious campus of 230 acres at the northeast edge of Joplin. The main campus has 160 acres on which are located five new brick and Carthage stone buildings. In addition, a number of buildings are being remodeled for instructional and student activity use. Seventy acres are reserved for the construction of student housing facilities in the near future.

SPIVA LIBRARY was the first building to be completed on the new campus. It sets the tone for an intellectual climate. Open stacks, listening laboratories that utilize dialogue equipment, conference rooms, and typing stations provide the students with excellent facilities for study and research.

HEARNES HALL is the administration headquarters and the reception center of the campus. In addition, it includes classrooms for instructional services and faculty offices.

THE SCIENCE AND MATH BUILDING includes three large elevated lecture rooms completely equipped for the presentation of lecture-table demonstrations. In addition, both natural and physical science laboratories show functional design. Provisions for classrooms and faculty offices complete the requirements of science and mathematics programs.

THE FINE ARTS COMPLEX is two buildings connected by an arcade. In one section are modern facilities for vocal and instrumental music instruction with individual practice rooms. The second building is designed for instruction in all areas of art and includes a large exhibit hall.

THE AUTO TECH BUILDING provides facilities for instructional services in automotive technology. It includes classroom space, storeroom facilities, ample laboratory accommodations, and offices for the instructors.

THE NURSING PROGRAM BUILDING houses the two-year degree nursing program. It is a modern six room house converted to accommodate the activities of this degree program.

THE LITTLE THEATRE is a renovated large barn. The upper level will be used for performances, and the lower level provides facilities for dressing rooms and lounge area.

THE CAFETERIA will be housed in a new structure of Spanish design to blend with an attached building, a two-story Spanish home which is used for offices.

THE COLLEGE BOOKSTORE is located near the cafeteria. It is the center for rental books to the student body and for supplies and supplemental materials.

# SCHEDULE OF FEES AND CHARGES

All fees and other charges are due and payable at the time of registration each semester. Registration is not complete until all fees are paid.

The College reserves the right to change fees and other charges without notice.

#### ACTIVITY FEES: (Per semester)

I.	For all students enrolled in eight semester hours or more postudent Activity	
	Student Activity	\$15.00
	College Union	10.00

II.	For all students enrolled in less than eight semester hours	
	College Union	5.00

#### INCIDENTAL FEES: (Per semester)

I.	I. Residents of Junior College District of Jasper County					
	Junior College Division Courses\$	3.00	per	sem.	hr.	
	Senior College Division Courses	6.00	per	sem.	hr.	

II. Residents of Missouri (Outside Junior College District)					
	Junior College Division Courses	6.00	per	sem.	hr. N
	Senior College Division Courses	6.00	per	sem.	hr.

III.	Non-Residents	(Out-of-s	tate)				
	Junior College	Division	Courses	\$10.00	per	sem.	hr.
	Senior College	Division	Courses	10.00	per	sem.	hr.

#### OTHER CHARGES:

Application for admission	\$ 5.00
Late registration	5.00
Change of class schedule	1.00
Commencement	10.00
Transcripts	1.00
Applied Music	32.00
Textbook rental (\$15.00 refundable)	\$30.00
Laboratory breakage and materials	(cost)

Application For Admission: An application fee of \$5.00 is charged for processing applications for admission. The payment of this fee should be mailed with the application. If the student registers at Missouri Southern College, the \$5.00 will be applied to his registration fees. This fee is not refundable.

Late Registration: A late registration fee of \$1.00 per semester hour is charged for students who register after classwork begins. This fee is not refundable.

Change of Class Schedule: Students will be charged \$1.00 for each class change requested after the second day classwork begins. (Refer to College calendar.)

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Commencement: Candidates for the Associate or Baccalaureate Degrees will be charged a \$10.00 commencement fee. This covers the cost of the diploma, rental of cap and gown, and other comencement activities. The fee is not subject to refund.

Transcripts: Each student is entitled to two official transcripts from the Junior College Division and/or from the Senior College Division without charge. There is a charge of \$1.00 for each additional copy. Payment must accompany the request for each transcript.

Applied Music: For one 30-minute lesson per week in applied music, the usual fee is \$32.00 per smester. The fee is paid to the instructor.

Textbook Rental: Students enrolled in eight or more credit hours during any semester pay a \$15.00 textbook rental fee and a \$15.00 deposit. Students enrolled in less than eight credit hours during any semester pay a \$3.00 rental and \$3.00 deposit for each course in which they are enrolled. The deposit is refunded when the student has returned all books, materials, and equipment in satisfactory condition. (Books may be purchased for full retail price.)

Laboratory Breakage and Materials: Occasionally a fee is charged for classroom materials, such as, subscription to a periodical. There are no charges for the use of equipment in laboratories. The student will be expected to pay for excessive breakage or loss of equipment due to negligence on the part of the student. A fair actual value of the loss will be determined by school officials. Students will pay for materials used in individual projects. (Example: automotive parts.)

#### REFUND POLICY:

Students who drop out of College before the fifth week of the semester or summer session are entitled to a partial return of refundable fees. The refund must be claimed during the term for which the refund applies. The refund will be computed as of the date the Registrar receives written notice from the student of his intention to drop classes.

The refund schedule is as follows:

4	After the fourth week			. No	refund
1	Within the third and fourth weeks	50	per	cent	refund
1	Within the first and second weeks	80	per	cent	refund

#### SUMMER SESSION

Rules and regulations which govern admissions to the first and second semesters during the regular school year shall also apply to the Summer Session.

Fees for the eight week Summer Session are as follows:

Residents	of Missouri	Non-Residents
Incidental Fee (per credit hour)	\$ 8.00	\$20.00
College Union	5.00	5.00
*Textbook Rental (per course)	6.00	6.00
*The rental charge is \$3.00 per course.	Three dollar	rs per course is

\*The rental charge is \$3.00 per course. Three dollars per course is refundable.

#### **EVENING SCHOOL**

Students enrolled in the Evening School for regular college credit courses, applicable toward an Associate or Baccalaureate Degree, will be subject to all rules and regulations of the Day School. Fees and other charges will be based on the Day School schedule with one exception, the Activity Fee. Since the Evening School students will not be required to pay it, they cannot expect the privileges of those who have paid Activity Fees.

Special fees will be announced in the Evening School Bulletin for classes not applicable to an Associate or Baccalaureate Degree.

# **ADMISSIONS**

# ADMISSION REQUIREMENTS TO THE JUNIOR COLLEGE DIVISION

#### GENERAL INFORMATION

The College regularly admits without examination graduates of fully accredited high schools of Missouri. A student entering from out of state must rank in the upper two-thirds of his high school graduating class. All students are expected to be of good moral character.

Former Missouri Southern College students who wish to re-enter must submit all credentials required of a new student applying for ad-

mission.

#### CREDENTIALS

Students applying for admission to the Junior College are required to provide the following credentials:

- 1. High School Transcript. An official transcript or transcripts of high school credits showing that he has met requirements for graduation.
- College Transcripts. Official transcripts and statements of honorable dismissal from each institution attended after high school graduation.
- 3. Application. An application for admission which must be filed with the Director of Admissions before the deadline as specified in the College calendar.
- 4. Application Fee. A fee of \$5.00 with the application of admission.
- 5. Physical Examination. A certificate of health filled out and signed by both the applicant and his doctor.
- 6. Placement Tests. Scores from the Missouri College Placement Tests (SCAT and MCET). (These tests are administered by colleges throughout the state of Missouri both during the spring and summer of each year. In unusual circumstances the tests may be administered by appointment at Missouri Southern College.)
- 7. Applicants For Admission to Nursing Program. Students who plan to enroll in the nursing program, in addition to the above credentials, must arrange an interview with the Director of Nursing.
- 8. Veterans who plan to attend under the G. I. Bill of Rights or veterans' orphans under the War Orphans Act must present a certificate of eligibility at the time of registration.

All credentials must be sent directly to the Director of Admissions, Missouri Southern College, Joplin, Missouri 64801. Prompt attention to these details will avoid delay in admission.

#### TYPES OF ADMISSIONS

#### I. Reguar Student

A. Evidence of graduation from an accredited high school.

1. As a public supported institution, Missouri Southern College accepts all graduates of Missouri high schools. Applicants with previous college work will not be considered under this provision.

Graduates of accredited high schools outside of the State of Missouri are eligible for admission as regular students if previous academic records meet the admission requirements.

#### B. By examination or equivalency certificate

- Arrangements for admission should be made with the Director of Admissions.
- 2. Students entering from other institutions must comply with the same scholarship regulations as are applied to all students enrolled at Missouri Southern College.

#### II. Special Student

Persons over 21 years of age who are unable to meet requirements as regular students and desire to take special studies may be admitted on special status upon presentation of satisfactory evidence that they are qualified to undertake college studies.

## STEPS IN JUNIOR COLLEGE ADMISSION AND ENROLLMENT

Step No. 1 Application:

The student must submit an application for admission. This form may be obtained from the Office of Admissions. Deadlines are specified in the College calendar.)

Step No. 2 Application Fee:

A fee of \$5.00 must accompany the application for admission.

(The fee is not refundable after the last day for filing application for admission, but will be applied to registration fees at the time of registration.)

Step No. 3 Health Examination:

This form is to be filled out and signed by both the student and his doctor.

Step No. 4 High School Transcripts:

A complete record of all high school work is required. Transcripts must be mailed from the high school directly to the Office of Admissions.

Step No. 5 College Transcripts:

Transcripts from all colleges attended must be mailed from the respective colleges directly to the Office of Admissions of Missouri Southern College.

Step No. 6. Missouri College Placement Tests:

All regularly enrolled students are required to take the Missouri College Placement Tests and file the results of these tests with the Office of Admissions. (Sudents may contact the Director of Guidance and Counseling for dates when tests will be administered.)

#### Sep No. 7 Enrollment Permit:

The Office of Admissions will issue the applicant an enrollment permit. This permit will give the date, time, and place that the student should report for enrollment and orientation.

#### Step No. 8. Enrollment Procedure:

1. Attend the College orientation session.

2. Develop a schedule of classes with an advisor who will be assigned to each student.

3. Follow the steps in enrollment which will be outlined in a special bulletin.

#### ADMISSION REQUIREMENTS TO THE SENIOR COLLEGE

#### GENERAL INFORMATION

Students transferring from other colleges with a minimum of 60 semester hours of acceptable college credit and a cumulative grade point average of C (2.00) or better are eligible for admission to the Senior College Division. All students are expected to be of good moral character. Missouri Southern College transfer students from the Junior College Division will be required to file an application for admission to the Senior College Division and submit credentials required of all transfer students. (Exception: Continuing students will not need to submit a certificate of health if one is already on file.)

#### CREDENTIALS

Students applying for admission to the Senior College Division are required to provide the following credentials:

- 1. High School Transcript. An official transcript or transcripts of high school credits showing that he has met requirements for graduation.
- College Transcripts. Official transcripts and statements of honorable dismissal from each institution attended after high school graduation.
- Application. An application for admission which must be filed with the Director of Admissions before the deadline as specified in the College calendar.
- Application Fee. A fee of \$5.00 with the application for admission.

- 5. Physical Examination. A certificate of health filled out and signed by both the applicant and his doctor.
- 6. Placement Tests. Test scores taken at other colleges attended. (An applicant may be required to take Missouri Southern College placement tests.)
- 7. Veterans who plan to attend under the G.I. Bill of Rights or veterans' orphans under the War Orphans Act must present a certificate of eligibility at the time of registration.

All credentials must be sent directly to the Director of Admissions, Missouri Southern College. Prompt attention to these details will avoid delay in admission.

# POLICIES RELATING TO TRANSFER STUDENTS

- 1. Students who are ineligible to return to the last institution will not be admitted to the Senior College Division of Missouri Southern College.
- 2. Students who are on academic probation must first petition by letter to the Committee on Academic Standards.
- 3. The maximum credit which a student may present from a junior college toward advanced standing is 64 semester hours. Exceptions are made if the student must meet requirements of a prescribed curriculum.
- 4. Senior college courses in which a student has received a grade lower than C will not be accepted for credit at Missouri Southern College.

## ENROLLMENT PERMIT

After an applicant has filed all required credentials for admission, he will be issued an enrollment permit. This permit will give the date, time, and place the student should report for enrollment and orientation.

ENROLLMENT PROCEDURE

June 12, 1966.

- 1. Attend the College orientation session.
- 2. Develop a schedule of classes with an advisor who will be assigned to each student.
- 3. Follow the steps in enrollment which will be outlined in a special bulletin.

# STUDENT PERSONNEL SERVICES

The maximum intellectual growth and personal development of the college student is a combination of academic study and participation in out-of-class activities. Therefore the educational program of Missouri Southern College includes all student-college relations in addition to formal instruction.

The student personnel services are designed to supplement, compliment, and implement the academic program of the College.

#### ADMISSIONS — ENROLLMENT — ORIENTATION

Missouri Southern College begins early in the academic year to interest prospective students. Through visits to area high schools that sponsor "Know Your College" programs, College visitations teams discuss phases of admission and attendance, and distribute forms, brochures, and college catalogs. After admission to the College the student is assigned to orientation sessions designed to acquaint him with school policies, student organizations, and other activities.

#### TESTING

Placement tests required of all new students entering Missouri Southern College are the same as those required for enrollment in many other Missouri colleges and universities, including the University of Missouri.

These tests are used for placement and are as follows:

- (1) School and College Ability Test (SCAT), Form A
- (2) The Missouri College English Test (MCET), Form B
- (3) The Missouri Mathematics Placement Test (MMPT), Form C-1

Students have several opportunities to take these tests as there are several testing centers throughout the state. High school seniors and others may take the tests during April, May, or during the summer preceding enrollment. Students taking these tests at some other center besides MSC will need to take the responsibility of having their test results sent to MSC by writing the University of Missouri which serves as a depository for all test results. STUDENTS MUST HAVE THESE TEST RESULTS ON FILE AT MSC IN ORDER TO ENROLL. Consult the MSC catalog or the local school for dates of administration of these tests.

#### COUNSELING SERVICES

Above everything else, Missouri Southern College is interested in the student as an individual. To this end, each student receives attention from one of the professionally trained members of the counseling and advisory staff. The instructor of each course is also available for private appointments to discuss any matters relating to a particular course which the student may be pursuing. Parents are also welcome to contact school officials about any phase of school work of special concern.

Students with personal problems may seek consultation by appointment with the College psychologist.

#### STUDENT HEALTH

The health services are not intended to replace the student's family physician or to assume the family's responsibility for the health of the student. Rather, it is to provide on the campus conditions to the maintenance of the student's health, and, in emergencies, to make him safe until his parents or other persons responsible can be advised.

A school nurse is on duty from 1:00 to 4:00 in the afternoon for consultation and first aid services. In cases where continuing care or treatment is necessary while the student is away from home, the school nurse will cooperate with the student's family physician.

Group health insurance is available to students at a reasonable cost.

#### SOCIAL STANDARDS

A student attending Missouri Southern College is expected to maintain a high standard of moral conduct. Forfeiture of the privilege to attend may result from unsatisfactory conduct. Students are expected to demonstrate maturity in their judgment.

Appropriate dress is expected on the campus during the regular school day.

Missouri Southern College does not permit the use of alcoholic beverages on campus. Any violation to this rule is subject to disciplinary action.

Smoking is prohibited in the library and in classrooms.

#### HOUSING

Although Missouri Southern College has no dormitories or residence halls, a list of desirable places to live in private homes, hotels, the Y.M. C.A. and Y.W.C.A. is available in the office of the Dean of Students. Sleeping rooms vary in rental from four to six dollars per week. Rooms with kitchen privileges and small apartments are also available to students at reasonable cost.

#### **OFF-CAMPUS EMPLOYMENT**

Students who must earn part of their college expenses while attending school will find many opportunities in Joplin and neighboring communities for part-time employment. The office of the Dean of Students maintains a current file of available employment. Announcements of part-time jobs are posted regularly on the bulletin board. Students desiring part-time employment should file an application with the Dean of Students.

#### COLLEGE STUDENT EMPLOYMENT

A work program similar to the Work-Study Program is one financed completely by the College. Each division in the College as well as certain service areas has a budget for student help. The type of work includes clerical, laboratory, custodial, and others. Inquiries should be made either to the Dean of Students or Division Chairmen.

#### FOOD SERVICES

Well balanced meals are served in the College cafeteria at reasonable prices. The cafeteria will seat approximately 400 students at one time.

#### **VETERANS**

The college is approved by the Veterans Administration to offer programs for veterans eligible under the provisions of Public Laws No. 894 and No. 550, and for those attending under the War-Orphans Act; Public Law 634.

#### SELECTIVE SERVICE

College Student Certificates (Form 109) are completed by all male students at time of registration, except those who have completed their military service obligation. These forms will be available to Draft Boards so the students currently enrolled my request educational deferment.

#### FOREIGN STUDENTS

The College is not staffed to give special attention to foreign students who apply for admission. Only those students will be considered who give evidence of proficiency in the use of the English language.

# FINANCIAL AIDS

#### Scholarships

General Information: Applications for scholarships are made to the Committee on Aids and Awards, Missouri Southern College, unless otherwise specified.

Dean H. E. Blaine: On April 2, 1957, the Board of Education of the School District of Joplin established two Scholarships in memory of Mr. H. E. Blaine, the first Dean of the Joplin Junior College. These scholarships, based on academic achievement, are awarded by Missouri Southern College to the highest-ranking boy and girl at the end of their freshman year and are to be used the following year in Missouri Southern College.

Missouri Southern College Avademic Scholarships: The College awards scholarships to the first or second ranking student in his high school graduating class within the Junior College District. In addition, an award is made to one student in the upper ten per cent of his graduating class for each fifty in the class of an area high school. The scholarship is presented through the high school principal in the Spring at award or graduation ceremonies. The first or second ranking student pays no regular fees. The students ranking in the upper ten per cent do not pay incidental fees.

Alumni Association: The College Alumni Association offers a scholarship open to any student nominated by an alumnus. Preference, however, will be given to sons and daughters of alumni.

Nominations for the Alumni Scholarship must be mailed to the Alumni Scholarship Committee, Missouri Southern College, before April

15.

Bank of Carthage: The Bank of Carthage, Carthage, Missouri, offers a scholarship annually to an outstanding freshman student to be used during the sophomore year. Applications must be received by April 15, of the student's freshman year and should be addressed to the Missouri Southern College Committee on Aids and Awards.

Russell Belden Memorial: Scholarhips are awarded from this fund to students above freshman level who are pursuing degree programs at the college. The basis of selection are need, scholarship, and character.

Circle K Club: The Circle K Club of Missouri Southern College offers a sophomore scholarship to a male student completing his freshman year at the college with a cumulative grade-point average of 2.3. The scholarship is based on need, leadership in the college, and scholarship. Applications must be received by April 15 of the student's freshman year and should be addressed to Missouri Southern College Committee on Aids and Awards.

Ada Coffey: The Ada Coffey Scholarship was established in 1963 by a former student. Miss Coffey was an instructor in English and literature at the College from September 1937 to August 1963. The recipient of the scholarship must pursue an Associate in Arts degree from Missouri Southern College.

William Hugh Sisk Memorial: This scholarship is awarded to a student admitted to the nursing program. The student must have ranked in the upper half of her high school graduating class and must show evidence of financial need.

40 and 8 Nursing Scholarship: The 40 and 8 scholarship is awarded to a student admitted to the nursing curriculum who ranked in the upper half of her high school graduating class and has financial need.

Student National Education Association: An award is made each year to a student preparing to become a teacher and who has demonstrated leadership ability while a member of a high school Future Teachers Association or the College SNEA.

Drummond Memorial Scholarship: This scholarship has been established to the memory of Edna Drummond, a teacher of Biology at Missouri Southern College. It is awarded to a high school graduate who is pursuing studies in the Biological Sciences at Missouri Southern College.

Performing Aids and Workshops: Awards are made to individuals who have demonstrated success or high potential in athletics, music, or dramatics. These individuals must show satisfactory progress in these college performance areas in order to continue the aid.

Workships are awarded to a small number of students who work in

leadership positions in the college publications.

Applications for performing aids or workships should be made to the director or sponsor of the particular activity.

#### STUDENT LOANS

Irwin Memorial Fund: This fund was established in memory of Arnold E. Irwin, instructor of political science at Joplin Junior College from 1946 to 1959. The Exchange Club of Joplin created a loan fund for deserving students of Missouri Southern College. The fund is available to students for emergency short-term loans. No security is required of the borrower, except that a note will be drawn up at the time the loan is made, for interest to begin at a time set by the adviser and the student. No interest will be charged before the time set in the adviser-student conference. The fund is administered by the Finance Officer and an advisory committee of the College.

B'Nai B'Rith Fund: A fund was established in 1966 in honor of the memory of B'Nai B'Rith member, David Pearl, to provide short-term loans to needy students. A note is prepared when the loan is made and a small interest charge may be required after a specified period. The Finance Officer and the Committee on Aids and Awards administer the program.

National Defense Student Loan Program: The purpose of the Program is to provide student loan funds for making long-time low-interest loans to students to pursue their college education.

Institutional Capital Contributions for the National Defense Student Loan Program have been obtained by donations from former students, funds of inactive student organizations and, a donation on December 1, 1960, from the Kappa Upsilon Pi Study Club of Joplin.

To be eligible for a loan, a student must be in need of the amount of the loan, pursue a course of study at the institution, be capable of maintaining good standing in the courses, and have been accepted for enrollment as a student, or if already attending an institution, be in good standing and in attendance. Requests for application blanks may be addressed to the Director of the NDSL Program.

United Student Aid Program: This loan program is sometimes referred to as the "Guarantee Loan Program" and provides low-cost loans for college students. The loans are made by certain local banks and are endorsed by the college. Repayments and the three per cent interest charge begin after the students leave college.

#### WORK-STUDY PROGRAMS

Missouri Southern College is participating in Title I-C of the Economic Opportunity Act of 1964. This section of the act is commonly referred to as the College Work-Study Program and is designed to provide jobs for college students whereby they may earn a significant portion of their current expenses while attending College. In order for students to be eligible to participate in this program, they must show that the financial aid received is necessary for them to attend college.

Further information pertaining to this program may be obtained by contacting the Director of the Work-Study Program at the College.

# STUDENT ACTIVITIES

Opportunities for participating in a wide variety of out-of-class activities is provided at Missouri Southern College. Students are encouraged to investigate the wide choice of activities and are invited to participate in one or more of these aspects of the College program.

#### GOVERNING BODIES

STUDENT SENATE . . . The responsibility for student government rests not only with the student officers and student boards and committees but also with each member of the student body. The growth and development of Missouri Southern College Student Government will be proportionate to the participation by the students.

The Student Senate serves as the governing body for students and acts as an intermediary between the faculty and student body. Members of the Student Senate gain experience in the functions of a student government and strive to promote the objectives of the Student Body Constitution. Duties of the Senate include the allocation of Student Activity funds to the various college organizations, the publication of a student directory and the student handbook, and the promotion of student activities, such as dances, parades, and assemblies.

The membership of the Student Senate consists of the Student Body Executive Officers, the Class Officers from the freshman and sophomore classes and a number of senators representing each class. The student body executive officers for the summer cabinet for the following year are elected late each spring. The class officers and student senators are elected early each fall. Interested students petition and campaign for office. The number of senators each class may have in the Student Senate is proportionate to the number of students in each class.

STUDENT CABINET . . . The Student Cabinet organized each spring is composed of a representative from each authorized student organization together with the student senate officers. This group acts in an advisory capacity to the student body president during the summer and the next regular school year. In addition, the student cabinet functions as a service committee from the end of the spring term until the time that the senate is fully organized in the following fall. During the summer months the Cabinet assumes the power and duties of the student senate; thus, it is often referred to as "The Summer Cabinet." At the beginning of each new school year, the Cabinet helps with the orientation program for new students; and before the Cabinet retires to its advisory role, it is responsible for conducting the elections of class officers and of student senators.

#### STUDENT ORGANIZATION

The College encourages student organizations which provide for the professional, social, academic, divisional, religious, political, or service interest of the students. New organizations may be established when approved by the Student Government and the College administration.

PHI THETA KAPPA (ETA CHI CHAPTER) is a national junior college scholastic fraternity to promote scholarship, the development of character, and the cultivation of fellowship among students of both sexes in the junior colleges of the United States.

THE STUDENT NATIONAL EDUCATION ASSOCIATION (ADA COFFEY CHAPTER) is the professional association for college students who are preparing to teach. Its members are members of duly chartered local chapters. Local chapters and state student education associations are integral parts of the Student NEA. A member of the Student NEA is a student member of the Missouri State Teachers Association and the National Education Association with all the rights, privileges, and responsibilities of associate membership in these professional organizations. Members receive the NEA Journal and School and Community. The Student NEA calendar includes many and varied academic and social activities.

THE COLLEGE PLAYERS promotes interest in dramatics. The members present several major productions and contribute to college assemblies and other school functions. Membership includes students interested in any field of dramatic work.

The organization provides additional opportunities for players to perform outside the college in programs requested by civic, religious, business, and professional organizations. The Players take several field trips each year to study production methods and performances in neighboring colleges and universities.

THE YOUNG WOMEN'S CHRISTIAN ASSOCIATION, organized in Joplin in 1938, is of service to the women students of the College. It offers every woman of the College an opportunity for development and training in leadership, religion, and social service. The group is affiliated with the National Student Christian Association and the National Student YWCA. Each year it contributes to and initiates the local World University Service drive to aid students in other countries.

Delegates may attend the state fall and spring conferences of the YWCA and the regional conference at Estes Park, Colorado, during the summer.

THE ENGINEERS CLUB fosters a professional spirit by promoting the interests and activities of its members. To accomplish this purpose the Club sponsors technical projects, professional speakers, field trips to industrial plants, and other activities. To be eligible for membership, a student must be enrolled in engineering, physical science, or related fields.

THE MATH CLUB increases the knowledge of students in areas of mathematics not covered in regular courses and encourages the student in individual study.

THE MODERN LANGUAGE CLUB offers the student the opportunity to become better acquainted with the people and customs of other countries. The club has a yearly project in which it renders service either here or abroad.

THE COLLEGIATE COUNCIL FOR THE UNITED NATIONS is an affiliate member of the national organization, an accredited Non-Government Organization with official NGO status at the United Nations and the United States Mission to the UN. By studying the United Nations, students reach conclusions about United States policies. CCUN activities include sponsoring a student delegation to the Midwest Model United Nations each spring.

THE CIRCLE K CLUB was organized in 1955 by the Joplin Kiwanis club to serve the College and the community. Male students who are willing to serve others are accepted members.

THE YOUNG DEMOCRATS CLUB encourages student interest and responsibility in politics. Its programs inform and give practical experience in party politics.

THE YOUNG REPUBLICAN CLUB advocates an understanding of party politics as well as an awareness of the responsibilities of the citizen to his country.

THE CROSSROADS (THE COLLEGE YEARBOOK) is produced by a student staff with faculty sponsors. The annual Crossroad's Ball is climaxed by the crowning of the Crossroads Queen. Students who work on the yearbook staff receive valuable experience in school publications.

THE CHART staff publishes 18 issues of the College newspaper. Throughout the year the editorial division uses the work of many reporters, feature writers, cartoonists, and typists. The business staff offers experience in advertising, salesmanship, and secretarial practices. Students interested in an editorial position should rgister for the Survey of Journalism course. Those wishing to freelance should attend weekly staff meetings.

#### STUDENT INTERESTS

Music... Participation is offered to students by five musical organizations. Choir, and Vocal Ensemble are open to all students with consent of the director. Auditions for the Choir are held at the beginning of each semester. Its membership is limited to 60 participants. Activities include concerts, performances for civic clubs and area schools, and tours. The Vocal Ensemble is a small select group that performs for civic programs and at special recitals.

The Concert Band, Stage Band, and Symphony Orchestra are offered to all students who have the instructor's consent. Concert Band performances include two major concerts each year. The stage Band is a limited membership group with activities that include at least two formal appearances each year, participation in Jazz Festivals, performances at assemblies, and for civic groups. The Symphony Orchestra is composed of outstanding college instrumentalists and area adult musicians. The group will give five concerts each school year, performing standard orchestral literature.

Drama . . . Students interested in dramatics have a variety of activities open to them. The key to full participation is the College Players.

Athletics... Missouri Southern College is a member of the National Junior College Athletic Association and participates in the following intercollegiate activities: basketball, football, track, golf, and tennis.

To be eligible for participation, students must meet the scholastic re-

quirements of the NJCAA.

# ACADEMIC POLICIES AND REGULATIONS

#### NUMBERING COURSES

Credit will not be allowed in any course which substantially duplicates any course already completed. Courses will be numbered as follows:

Do not apply to baccalaureate degree programs	000-100	
Freshman courses	101-199	
Sophomore courses		
Junior courses	300-399	
Senior courses	400-499	

#### GRADES AND GRADE POINTS

In order that academic achievement may be recorded and made available for reference, when needed, the following system of recording grades will be used:

A-Excellent-4 grade points per credit hour

B-Superior-3 grade points per credit hour

C-Average-2 grade points per credit hour

D-Unsatisfactory-1 grade point per credit hour

F-Failing-0 grade points per credit hour

WP-Withdrawal Passing-0 grade points per credit hour

WF-Withdrawal Failing-0 grade points per credit hour

I-Incomplete-0 grade points per credit hour

No credits are earned in courses in which grades F, WP, WF, or I are received. Grades of WP are not used in computing grade point average. Grades of I must be made up within two weeks after the close of a semester or summer session or will be automatically converted to F.

A grade point average (GPA) at the end of any semester is the total number of grade points earned divided by the total number of hours attempted.

# MINIMUM STANDARDS OF PROGRESS

A student's cumulative grade point average (GPA) is used to evaluate his progress. If a student's grade point average falls below the minimum standards of progress, his work is considered unsatisfactory.

Students are considered to be making minimum progress toward a degree if they have a cumulative grade point average as follows:

After attempting	12-17	hours,	inclusive	1.50	(GPA)
After attempting	18-29	hours,	inclusive	1.60	(GPA)
After attempting	30-44	hours,	inclusive	1.75	(GPA)

Any student with 45 semester hours or more whose cumulative record at the end of a semester or summer session averages less than 2.00 (GPA) is considered making unsatisfactory progress.

#### ACADEMIC WARNING

A student who is making unsatisfactory progress will be issued an academic warning and placed on probation for one semester. During the semester on probation, he must raise his grade point average to the level

prescribed in the minimum standards of progress.

If a student on probation achieves a 2.00 (GPA) on a full-time load during the probationary period but does not raise his cumulative average to the required standing, he will be granted permission to continue one or more semesters on probation. Conditions which are cause for two successive probations are sufficient reason for dismissal from College.

#### **SUSPENSION**

Students on academic probation who fail to earn a grade point average of 2.00 or better for the semester in attendance while on academic probation will be suspended from college for one semester. The student may petition the Committee on Academic Standards for re-admission after one semester has elapsed.

Re-admissions will be considered only in cases where the student can present evidence to the Committee which would indicate positive change in circumstances suggesting a high probability of future successful per-

formance.

A student whose grade point average is less than 1.0 will be automatically suspended from college, except a student who is in the first semester of college may petition the Committee on Academic Standards immediately for reinstatement.

The College reserves the right to suspend any student whose performance gives evidence that he cannot continue with profit to himself

and credit to the institution.

#### REINSTATEMENT

Any student suspended from college for poor scholarship may petition for reinstatement to the Committee on Academic Standards. If the Committee approves the petition, the student will be invited to appear in person and present his case for reinstatement. Each petition will be considered on its own merit. Reinstatement is not automatic.

#### REPETITION OF COURSES

A student may repeat a course in which he has received a mark below C; however, the original grade will remain on the record and both grades will be counted in arriving at the grade point average. Any course may be repeated only once. This policy applies to students entering Missouri Southern College for the first time in September, 1967.

#### STUDENT LOAD

Normal registration for any one semester is 15 semester hours, exclusive of physical education activity courses, band, orchestra and chorus. Maximum registration without special permission of a Division Chairman

or the Dean of the College, exclusive of physical education activity courses, band, orchestra, and chorus is 16 semester hours. Only students who have given evidence of superior academic ability will be granted permission to increase their course load beyond the maximum. Exceptions are made when a student must meet requirements of a prescribed curriculum.

#### CLASSIFICATION OF STUDENTS

Students are classified as Freshmen, Sophomores, Juniors, Seniors, special, full-time, and part-time.

Freshman — From 0 semester hours through 28

Sophomore — From 29 semester hours through 655

Junior — From 60 semester hours through 89

Senior — More than 89 semester hours and not graduated.

Special Students: Students enrolled for no credit, and post graduates will be classified as special students.

Full-time Student: After registration, a student enrolled for 12 semester hours or more will be considered a full-time student.

Part-time Student: After registration, a student who is enrolled in less than 12 semester hours will be considered a part-time student.

#### ATTENDANCE

Any absence for whatever cause is a handicap to both the instructor and the student. Registration presupposes regular attendance at recitations, lectures, and laboratory session. In general, the opportunity for making up classwork missed is to be worked out between the instructor and the student upon the student's initiative. When a student has been absent two class meetings more than the credit hours of the course, he will be reported as dropped. He may request reinstatement through the Dean of Students.

#### WITHDRAWAL FROM COURSES

To withdraw from a course, a student must fill out a change of registration card obtained from the Registrar's Office, have his advisor or division chairman approve it, and return the card to the Registrar's Office.

- 1. If a student withdraws officially from a course during the first two weeks of a semester, no entry will be made of the course on the permanent record. If withdrawal is made after the second week and before the end of the fourth week, a mark of "W" is entered in the record.
- 2. Withdrawal from individual courses after the fourth week of a semester is subject to the following conditions:

- (a) If a student is doing passing work in a course, he may withdraw upon approval of his advisor or division chairman with a grade of "WP".
- (b) A student doing failing work in a course may withdraw upon approval of his advisor or division chairman. A grade of "WF" will be assigned each class withdrawn while doing failing work. A "WF" counts the same as an "F" in computing grade point averages.
- (c) If a student discontinues a class during a semester without officially withdrawing, he will receive a grade of "WF" in the class discontinued.
- (d) When a student is dropped from a class because of excessive absences, he will receive a grade of "WF" in the class from which he is dropped.

#### WITHDRAW FROM COLLEGE

Except at the end of a semester or regular school session, any student who withdraws from Missouri Southern College must obtain a "Withdrawal From School Permit" from the Registrar's Office. When this form is completely processed, the student will report to the Registrar's Office for final withdrawal. If all records are clear, the student is honorably dropped from the College and is eligible to return, subject to minimum standards of progress regulations.

A student who leaves the College without completing the "With-drawal From School Permit," except at the end of a semester or a regular school session, will not be eligible to re-enter the following semester.

#### **AUDITORS**

With the consent of the chairman of the division and the instructor concerned, a student may be admitted to a course as an auditor. Auditors must be registered and pay fees as a regular or special student. They receive no college credit. No record will be made on the student's permanent record of the course audit.

#### ADVANCED PLACEMENT

A student whose educational experiences appear to have given him proficiency in a course may request permission to take an advanced placement examination. The examination will be comprehensive, designed to cover the subjict fully. The examinations must be taken at least one month prior to registration. Normally the examinations given are not for credit; however, credit may be allowed in special circumstances. Request to take an advanced placement examination must be in writing addressed to the chairman of the division in which the examination is given.

#### CORRESPONDENCE AND EXTENSION

A student may not offer by correspondence or extension more than one-fourth of the total number of semester hours required for a degree or certificate.

#### MINIMUM RESIDENT CREDIT FOR DEGREES

A student must earn in residence at this College during his last semester:

- 1. Junior College Division 15 of his final 20 semester hours
- 2. Senior College Division 30 of his final 36 semester hours

#### **GRADUATION**

Missouri Southern College grants the Bachelor of Arts, Bachelor of Science, Bachelor of Science in Education, Associate of Arts, and Associate of Science degrees. In addition, the College awards certificates of pro-

ficiency.

For a student to be admitted to candidacy for any degree or award, his scholastic record must show that he has satisfied the entrance requirements and that he can fulfill the requirements for graduation upon the completion of the courses for which he has registered. He must file application for candidacy with the Registrar no later than six weeks after his registration in the last semester. A student who plans to complete graduation requirements at the close of a Summer Session must file for candidacy at the time of registration for the Summer Session. A commencement fee of \$10.00 must be paid at the time of application for candidacy.

#### HONORS AT GRADUATION

To be eligible for graduation with honors, a student must have earned a cumulative grade average of 3.50 and must have completed at Missouri Southern College at least half of the number of hours required for graduation. Those with a cumulative grade average of 3.50 to 3.65 graduate with Third Honors; 3.65 to 3.75, Second Honors; and 3.75 and above, First Honors.

### CATALOG FOR CHECKING DEGREE REQUIREMENTS

Students are subject to current administrative and general policies and regulations. The 1967-1968 catalog becomes effective June 1, 1967.

A candidate for a degree may use as a basis for degree requirements the general catalog issued for any year following the date of his first registration in the College, so long as it is not more than five years prior to the date the degree is conferred. The candidate must have been in residence during the year of the catalog selected.

### STATE LEGISLATION REQUIREMENT

Sections 10373, 10374, 10374a, 10374b, 10374c (S. C. S. for S. B. 4) of the Laws of Missouri, 1947 (64th General Assembly), prescribe that all candidates for a degree issued by the colleges and universities of Missouri must have completed courses of instruction in and "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the State of Missouri, and in American History, including the study of American institutions."

12 sand son

Students may comply with the law (1) by completing courses embracing the subject matter specified by the law and receiving credit therein, preferably before admission to senior college work, or, (2) by certification of the completion of such requirements in another collegiate institution.

Students in the following categories will have fulfilled the requirement of this law:

1. All students who have completed the general education curriculum requirements in Area B.

2. Transfer students who have completed an American history course covering and including the constitutional period and one of the following:

State Government

Missouri History and Government, or pass a special examination on the new Missouri Constitution.

# JUNIOR COLLEGE DIVISION ASSOCIATE OF ARTS DEGREE PROGRAMS

#### **GRADUATION REQUIREMENTS:**

Missouri Southern College confers the title of Associate of Arts upon those students who (1) complete the General Education requirements for the degree and (2) accumulate a total of 62 semester hours with a cumulative grade point average of 2.0. Students who wish to pursue a preprofessional curriculum with the intention of transferring to another college at the end of the sophomore year should follow programs outlined in the section under Junior College Curricula. Students working toward a Baccalaurate Degree at Missouri Southern College should follow requirements of the specific degree. All students' programs must be approved by an appointed advisor.

## GENERAL EDUCATION REQUIREMENTS FOR ASSOCIATE OF ARTS DEGREE

Area A. Basic Skills: Credi	t Hours
English 102 and 103, or English 104	6
Speech 101 or 201	
in mathematics	3
	12
Area B. Social and Behavioral Science: History 104	5
One of the following: Political Science 120 or 232 or History 100 or 200 or 204 or Geography 220 or Psychology 101 Or Sociology 140 or Economics 202	5
	10
Area C. Humanities:	
English 106 or 107 or 207 or 208 One of the following: Music 150, Art 102, Drama 221	3
Philosophy 220	3
	6
Area D. Natural Science: Biological or Physical Science	5

Area E. Health and Physical Education:	:	
Physical Education 101 and 102 or	-	
Health Education 162		. 2
		-
	TOTAL:	35

## ASSOCIATE OF SCIENCE DEGREE PROGRAMS

The title of Associate of Science will be conferred upon those students completing a minimum of 62 hours with a cumulative grade point average of 2.0 in one of the semi-professional or vocational-technical curricula listed below:

1. Automotive Technology

2. Data Processing

3. Nursing

4. Vocational General Business

A. Accounting

- B. Business Administration
- C. Computer Programing and Data Processing
- D. Electronic Data Processing Coordinating

E. Secretarial Science

This degree is designed to prepare an individual for employment and is not recommended for students desiring to complete the requirements for a baccalaureate degree.

Students desiring this degree must complete a specific curriculum and must fulfill the following General Education requirements:

## GENERAL EDUCATION REQUIREMENTS FOR ASSOCIATE OF SCIENCE DEGREE

Area A. Basic Skills:	
Six semester hours selected from the following:	
English 102, 103, 104, or	
one math elective	6
Area B. Social and Behavioral Science	
Five semester hours selected from the following:	
(one course in U. S. History or U. S. Government	
is required) History, Government, Sociology,	
or Psychology	5
Area C. Humanities:	,
Any course in speech, drama, literature,	
philosophy, or an appreciation course in art	
or music	2
Area D. Biological or Physical Science	5
Area E. Physical Education:	,
Physical Education 101 and 102 or	
Health Education 162	2
Treatth Education 102	2
	7.1

## SEMI-PROFESSIONAL AND TECHNICAL CURRICULA

The Semi-Professional and Technical Curricula are designed for students who have no desire, at the present time, to continue formal collegiate instruction leading to a Baccalaureate Degree. These students seek specialized instruction which will prepare them for employment in the shortest possible time. Special skills and training are given high priority in these curricula.

Students enrolling in these curricula should understand that courses in the specialized areas may not be applicable toward the Baccalaureate

Degree.

## DIVISION OF SEMI-PROFESSIONAL AND TECHNICAL EDUCATION

Chairman-James K. Maupin

Business: Division of Business and Economics faculty

Data Processing: (Position to be filled)

Nursing: Bessie Vediz, Juanita Hulen, Jenean Sears

Automotive Technology: Dwight Mason (Second staff member to be added)

Curricula in business, data processing, nursing, and automotive technology are offered in the Division of Semi-Professional and Technical Education to provide intensive training required in these specialized fields. Upon satisfactory completion of the required courses in a field of specialized study, the student will be granted a Certificate of Completion or the Associate of Science Degree.

These programs, which have been developed with the advice of representatives of business, governmental agencies, and the professions, provide the student with the educational background to enter gainful em-

ployment.

#### GENERAL BUSINESS

#### DEGREE: Associate of Science

The General Business curriculum has been designed to prepare students for supervisory and managerial positions, or to operate a private business. It provides the fundamental knowledge of marketing and management required for effective business operations. Practical techniques, skills of communication, and good human relations are developed in a realistic manner.

In addition to the General Education requirements for the Associate of Science Degree the following courses are required:

Course Number	Course Title	Credit	Hours
101 and 102 101 201 and 202 301 and 302 350 320	Accounting Introduction to Business Principles of Economics Business Law Business Organization and Management Advertising *Electives		3 6 6 3

\*Electives should be selected from the business area of Personnel Management, Principles of Marketing, Retailing, Salesmanship, Business Communications, or in Psychology.

Suggested order of study:	
FIRST  First Semester  English 102	YEAR  Second Semester  English 103
Business Mathematics 105   3   (or Mathematics 022 or 133),   Introduction to Business 101   3   General Psychology 101   3   Physical Education 101   1	Speech Techniques 101         3           Principles of Economics 201         3           Elective         3           Physical Education 102         1
16 SECON	ND YEAR
First Semester U.S. History 104	Second Semester Fund. of Physical Science 125 5 or General Biology 101 Business Law 302 3 Advertising 320 3 Business Communicatins 120 3 Elective 2-3

16 or 17

17

#### ACCOUNTING

#### DEGREE: Associate of Science

The Accounting curriculum has been developed by Missouri Southern College to prepare students to enter public accounting firms, industry, banking, and government service as accounting assistants or accounting clerks.

In addition to the General Education requirements for the Associate of Science Degree the following courses are required:

Course Number	Course Title Cree	lit Hours
101, 102, 201 202 and 401	Accounting	. 15
102 or 201	Typewriting	3
101	Introduction to Business	
350	Business Organization and Management	3
110	Office Machines	3
201 and 202	Principles of Economics	6
301	Business Law	
001	*Electives	5

\*Electives should be selected in the areas of Business Law, Auditing, Statistics, or Mathematics.

Suggested order of study:

#### FIRST YEAR

First Semester  English 102	3 3 3	Second Semester English 103	3 3 3
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#### SECOND YEAR

First Semester Accounting 201	5	Second Semester Cost Accounting 202 Tax Accounting 401 Fund. of Physical Science 125 or General Biology 101 Principles of Economics 202 Business Law 301	3 5 3
			17

#### DATA PROCESSING & COMPUTER PROGRAMMING

DEGREE: Associate of Science

In consideration of the rapid increase in the use of electronic equipment in business and industry, the Data Processing curriculum has been developed by Missouri Southern College. Students successfully completing this curriculum will find many opportunities for employment in such areas as banking, industry, and various governmental agencies.

A two-year curriculum is outlined below. Although the order in which courses are taken may be modified to meet individual needs, all courses are required for the Associate of Science Degree with a major in Data Procsssing.

In addition to the General Education requirements for the Associate of Science Degree the following courses are required:

Course Number	Course Title Course	Hours
101, 102 and 201	Accounting	9
022 or 133	Algebra	3
170	Basic Computing Machines	3
172	Key-Punch Operation	
180	Data Processing Applications	
181	Computor Machine and Machine Language	
315	Business Statistics	3
173	Introduction to Programming	3
182	Systems Development and Design	3
201 and 202	Principles of Economics	6
350	Business Organization and Management	3
177	Advanced Programming	3

Suggested order of study:

#### FIRST YEAR

First Semester		Second Semester	
Accounting 101	3	Accounting 102	3
Engish 102	3	Business Communications 120	3
Intermediate Aigebra 022	3	Introduction to Programming 175	3
(or college algebra 133)		Computer Machine and Machine	
Basic Computing Machines 170	3	Language 181	3
Key-Punch Operation 172	3	Business Statistics 315	3
Physical Education 101	1	Physical Education 102	1
	-		
	16		16

#### SECOND VEAR

SECON	DILAK
First Semester	Second Semester
Accounting 201 3	Business Organization and
Advanced Programming 177 3	Management 350 3
Principles of Economics 201 3	Principles of Economics 202 3
Systems Development & Design 182 3	Speech 101 or 102 3
Fundamentals of Physical	Data Processing Applications 180 3
Science 125 5	U.S. History 104, or U.S.
	Government 120 and State
	Government 222 5
17	17

### ELECTRONIC DATA PROCESSING COORDINATOR

DEGREE: Asociate of Science

This curriculum will prepare the graduate for immediate employment in tabulating departments in banks, industries, or governmental agencies. He would be capable of simple program design and operation of tab equipment and possess an extensive background in general secretarial work.

In addition to the General Education requirements for the Associate of Science Degree the following courses are required:

Course Number	Course Title Credi	t Hours
101 and 102	Accounting	6
022 or133	Algebra	
201	Typewriting	
101	Introduction to Business	
350	Business Organization & Management	3
170	Basic Computing Machines	3
172	Key-Punch Operation	3
175	Introduction to Programming	3
177	Advanced Programming	3
	*Business Electives	16

\*Electives should be selected from the business areas of Statistics, Economics, Shorthand, Secretarial Procedures, Business Law, or Office Machines.

Suggested order of study:

#### FIRST YEAR

First Semester  English 102	3 3 3	Second Semester Accounting 102	3 3 3

#### SECOND YEAR

OL	COLIE		
First Semester U.S. History 104 or U.S. Government 120 and State Government 222 Key-Punch Operation 172 Introduction to Programming 175 Principles of Economics 201 Business Organization and Management 350	3 3 3	Second Semester Natural Science	3 3

#### COMPUTING ANALYSIS

#### DEGREE: Associate of Science

This curiculum will prepare the graduate for entry into the fields of Science and Engineering as a Computer Programer. In this field the programer confers with engineers, scientists and other officials concerned, to determine if data meets the needs of the problems and, if necessary, develops mathematical formulas and procedures to provide more efficient machine operation.

In addition to the General Education requirements for the Associate of Science Degree the following courses are required:

Course Number	Course Title	Credit	Hours
103	Introduction to the Logic of Mathematics	******	3
145 and 155	Calculus w/Analytic Geometry		10
255 and 265	General Physics		10
453	Numerical Analysis		
175	Introduction to Programming		3
177	Advanced Programming		3
181	Computer Machine & Machine Language	*******	3
280	Strength of Materials		3
290	Analog Computers		
	*Electives		

\*Electives should be selected from the mathematics or Physical Science areas of Calculus III (Math 265) and statistics, differential equations, Vector analysis, Analytical mechanics, or Heat and Thermodynamics.

FIRST YEAR

#### Suggested order of study:

	Second Semester	
3	Technical Report Writing 130	
	(or English 103)	3
5		5
3	Data Processing Application 180	3
	Computer Machine and Machine	
3	Language 181	3
1	Speech 101 or 202	3
	3	Technical Report Writing 130 (or English 103)  Calculus w/Analytic Geometry 145 Data Processing Application 180 Computer Machine and Machine Language 181

SEC	OND Y	YEAR	
First Semester Statistics 123	3 5 5 3	Second Semester Analog Computers 290 Numerical Analysis 453 General Physics 265 U.S. History 104 or U.S. Government 120 and State Government 222	4 5
11			17

17

15

<sup>\*</sup>Student would take Intermediate Algebra preceeding semester if needed.

#### SECRETARIAL SCIENCE

#### DEGREE: Associate of Science

The Secretarial Science curriculum has been developed to prepare students for positions as professional secretaries.

In addition to the General Education Requirements for the Associate of Science Degree the following courses are required:

Course Number	Course Title	Credit Hours
101	Introduction to Business	3
101	Accounting	3
201	Advanced Typewriting	3
220	Dictation and Transcription	3
230	Secretarial Procedures	
301	Business Law	3
	*Electives	

\*Electives may include prerequisit courses in Shorthand and Typewriting leading to Advanced Typewriting (201) and Dictation and Transcription (220). Other electives must be selected from the areas of Business Organization and Management, Accounting, Principles of Economics, Geography, Business Communications, General Psychology, and Office Machines.

#### Suggested order of study:

#### FIRST YEAR

First Semester  English 102	3 3 3 3 1 3	Second Semester English 103 or Business Communications 120 Shorthand 111 or Dictation and Transcription 220 Typewriting 102 or Business Elective Accounting 101 Speech Techniques 101 Physical Education 102	3
	16		16
CT	CONTO	VEAD	

SEC	JND YEAR
First Semester U.S. History 104	Second Semester   Fundamentals of Physical   Science 125 or General   Biology 101
U.S. History 104	Science 125 or General Biology 101 Dictation and Transcription 220 or Business Electives Secretarial Procedures 230 Business Law 301 *Elective

\*Electives: Principles of Economics; Business Organization and Management; Accounting; Geography of United States; General Psychology; Typewriting 201 and Dictation and Transcription 220 are required for graduation.

#### ONE YEAR SECRETARIAL-TYPIST

Certificate of Achievement:

The Secretarial Certificate curriculum has been developed to provide students with the training to obtain employment as secretarial typist. Upon successful completion of the required course Missouri Southern will grant a Certificate of Achievement.

Suggested order of study:			
First Semester		Second Semester	
English 102	3	Dictation & Transcription 220	3
Shorthand 210	3	Accounting 101	3
Typewriting 201	3	Speech Techniques 101	3
Introduction to Business 101	3	Office Machines 110	3
Business Mathematics 105	3	Business Communications 120	3
			-
	15		15

#### NURSING CURRICULUM

DEGREE: Associate of Science

Missouri Southern College offers a nursing program leading to an Associate of Science Degree. Graduates of this program are eligible to take the Missouri State Board of Nursing Examinations for a license as a Registered Nurse, (R.N.). This program is accredited by the Missouri State Board of Nursing.

Graduates of the Associate Degree Nursing Program are prepared to give care to patients as beginning general staff nurses. They are also prepared to share responsibility for care of patients with members of nurse

ing and other allied health teams.

The Associate Degree Nursing Program is designed to fulfill the educational needs of qualified high school graduates who want to prepare for nursing in a relatively short time and who want to study in a multipurpose collegiate institution where they share the responsibilities, privileges, and intellectual and social experiences with all other students.

Suggested order of study:

Suggested order of study:	
,	ST YEAR   Second Semester   Chemistry 105   5   Psychology 101   3   Medical & Surgical Nursing 120   8   Physical Education 102   1
Psychiatric Nursing 130 4 Growth and Development 140 3	ER SESSION 17
7	NID VEAD
	OND YEAR
First Semester  Microbiology 210	Second Semester
17	17

#### AUTOMOTIVE TECHNOLOGY

DEGREE: Associate of Science

Missouri Southern College offers a planned curriculum in Automotive Technology. Major emphasis in this curriculum is placed on specialization in automotive service; however, the training received also provides the background for entry into research and experimental fields. General education courses providing a basis for growth as an individual, a family member and a citizen are included in the curriculum.

The curriculum at Missouri Southern College is college oriented. Students are regular members of the college student body. A full range of campus activities is open to them, and they are expected and encour-

aged to participate in extracurricular activities.

In addition to the General Education Requirements for the Associate

of Science Degree the following courses are required:

Course Number Course Title	
111 Technical Mathematics	
100 Automotive Engines	
130 Technical Report Writing (or English 1	102)
101 Business and Shop Records (or Account	ting 101)
1 Engineering Drawing	
120 Automotive Electrical, Ignition and	
Carburation Systems	
101 General Psychology	
190 Technical Science (or El. Col. Physics 1	55)
200 Automotive Chassis, Brakes and Transi	missions
220 Automotive Refrigeration and Air Cond	litioning
250 Automotive Body and Paint	
260 Automotive Servicing	
*Electives	

\*Electives should be selected from the fields of Business Law or Economics. Suggested order of study:

First Semester English 102 Fundamentals of Physical Science 125 Technical Mathematics 111 Automotive Engines 100 Physical Education 101	. 3 . 5 . 3	YEAR  Second Semester  Technical Report Writing 130 (or English 103)  Accounting 101 (or Business and Shop Records  Engineering Drawing 1  General Psychology 101  Automotive Electrical, Ignition and Carburation, Systems 120  Physical Education 102	3 2
	17		17

	17		17
First Semester U.S. American History 104 Technical Science 190 Automotive Chassis, Brakes, and Transmissions 200 Automotive Refrigeration and Air-conditioning 220	5 4 5	YEAR  Second Semester  Speech Techniques 101  Business Law 301  Automotive Servicing 260  Automotive Body and Paint 250	3 5

## JUNIOR COLLEGE TRANSFER CURRICULA

The Junior College transfer curricula are designed for students who desire later to continue in the Senior Division at Missouri Southern College or to transfer to other baccalaureate granting institutions. It should be clearly understood by the student that all such institutions have their own entrance requirements, and any student interested in such prospective transfer should consult the latest catalogues of those colleges. The curricula set forth in this section under various headings are ordinarily sufficient to satisfy requirements of other colleges and universities.

Students beginning their education in the Junior College Division of Missouri Southern College with the intentions of continuing their study in the Senior College Division leading to a Baccalaureate Degree should follow the suggested curriculum as outlined in the Senior College Division.

#### AGRICULTURE CURRICULUM

DEGREE: Associate of Arts

In addition to the General Educational requirements the following courses are suggested:

Courses	dit Hours
Chemistry	
Botany or Zoology	5
Economics	5
Algebra	3
Accounting	3
General Psychology	3
Sociology	3
*Electives	10

<sup>\*</sup>Elective should be selected in accord with the requirements of the curriculum of the College to which the student will transfer.

#### DENTAL CURRICULUM

DEGREE: Associate of Arts

In addition to the General Education requirements the following courses are suggested:\*

Courses Credit	Hours
Chemistry Zoology Anatomy and Physiology Physics Electives	8 5 5 8 3

ENGINEERING CURRICULUM		
DEGREE: Associate of Arts		
In addition to the General Education requirements	the f	following
courses are suggested:		
Courses		lit Hours
Mathematics 145, 225 and 265		15
Chemistry 155 and 153		8
Engineering Drawing		2
**Descriptive Geometry		2
Physics 225 and 265		10
Electives		5
*The admission requirements for this curriculum must inclumathematics and one unit in science with laboratory.	de fou	ir units in

\*\*Not required of Chemical Engineers.
Suggested order of study:

FIRST	YEAR

	Second Semester	
3	English 103	3
5	Mathematics 255	5
2	Descriptive Geometry or	
	**Qualitative Analysis	-3
	Chemistry 153	
	Physics 255	5
	Physical Education	
_		
17	19 or	20
	2 1 5 1	3 English 103

#### COND VEAD

Frst Semester  Mathematics 265 Physics 265 History of U.S. English Literature	5 5 5	Second Semester  Mathematics 323 Statics Speech Atomic and Nuclear Physics Psychology Electives	5 3 3
	18		19

\*Students who do not qualify for Mathematics 145 will be one semester behind in this schedule in both Mathematics and Physics.

\*\*Students electing to take Qualitative Ánalysis must wait until the sophomore year to take Physics 255.

#### JOURNALISM CURRICULUM

DEGREE: Associate of Arts

Includes preparation for Editorial, Advertising, Publishing and non-technical Radio Curriculums.

In addition to the General Education requirements the following courses are suggested:\*

 Courses
 Credit Hours

 Foreign Language (in 1 language)
 13

 Economics
 5

 Survey of Journalism
 1

 Electives
 8

\*Consult catalog from school to which you will transfer.

\*One unit of Typewriting should be included in the high school credits.

\*\*Electives should be chosen from Sociology, General Psychology, Mathematics,
Exposition, Accounting.

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#### MEDICAL CURRICULUM

DEGREE: Associate of Arts

In addition to the General Education requirements the following courses are suggested:\*

Courses	Credit Hours
**Foreign Language (in one language)	10
Chemistry	
Qualitative Analysis	3
Zoology	5
Anatomy and Physiology	
Physics	
Electives	
Consult catalog of the medical school to which you will	

\*\*Not required if the particular school the candidate plans to attend does not require a foreign language.

The student should select a major in science or mathematics from the Senior College Curricula. Some of the above courses may be taken while the student is a junior or senior.

#### MEDICAL TECHNOLOGIST CURRICULUM

#### DEGREE: Associate of Arts

In addition to the General Education requirements the following courses are suggested:\*

Courses	Credit	Hours
Chemistry		8
Quantitative Analysis		5
Qualitative Analysis		3
Zoology		5
Botany		5
Anatomy and Physiology		5
Electives	1	none
(The student should have satisfactorily completed a co	urse it	n type

(The student should have satisfactorily completed a course in typewriting in high school).

\*Consult catalog of the school to which you will transfer.

#### OPTOMETRY CURRICULUM

#### DEGREE: Associate of Arts

In addition to the General Education requirements the following courses are suggested:\*

Courses	Hours
English Literature	3
Algebra and Trigonometry	

Zoology	5
Chemistry	
Physics	8
General Psychology	3
Electives	5
*Consult catalog of the school to which you will transfer.	

#### PHARMACY CURRICULUM

#### DEGREE: Associate of Arts

In addition to the General Education requirements the following courses are suggested:\*

Courses	t Hours
Algbra and Trigonometry	5
Zoology	5
General Chemistry	8
Physics	8
Accounting	3
Botany	5
Qualitative Analysis	3
Quantitative Analysis	5
Electives	none
*Commit antalog of the solved to make your will two mater	

<sup>\*</sup>Consult catalog of the school to which you will transfer.

#### PRE-LAW CURRICULUM

Students following a Pre-Law curriculum usually work toward a Bachelor of Arts Degree with a major in English, History, or Political Science. Consult the Senior College section for the first two years. Study the requirements listed in the college catalog of the school to which you will transfer.

## SENIOR COLLEGE DIVISION

## BACCALAUREATE DEGREE PROGRAMS

#### GRADUATION REQUIREMENTS:

Graduation requirements for the senior college program fall into these categories: (1) General college requirements, (2) Specific degree requirements, and (3) Departmental major and minor requirements. These three catagories are explained in the following sections:

#### I. GENERAL COLLEGE REQUIREMENTS

- A. Requirements Common To All Baccalaureate Degrees
  - 1. Total semester hours required: 124 semester hours
  - 2. Total semester hours Upper Division 40
  - 3. Grade point average for all courses taken: 2.00

#### B. General Education Curriculum

Area A. Basic Skills

A program of general education is required of all students, including transfer students, in a baccalaureate program. These general studies are aimed at providing every graduate with a liberal education in the basic areas of learning.

Credit Hours

Tirea Ti. Dasie Okins	
English 102 and 103 Composition or *English 104 can be submitted for the total	6
composition requirement.	
Speech 101 Speech Techniques	3
or	
Speech 201 Public Speaking	
Mathematics 103 Introduction to the Logic of Math	3
Or Mathematics 112 College Algebra	
Mathematics 113 College Algebra	
or	
an equivalent course	
TOTAL hours required in Area A	12-14
Area B. Social and Behavioral Sciences	
History 104 History of United States	5
Psychology 101 General Psychology	3
One of the following:	2-3
Pol. Science 120 U.S. Government	20
Pol. Science 222 State Government	
Pol. Science 324 Comparative Government	
	2 ~
One of the following:	3-5
	3-5

History 203 or 204 Modern European History History 313 Mediterranean World History 319 Economic History of U.S. Economics 201 or 202 Principles of Economics Geography 220 Regions and Nations Geography 335 Geography of U.S.S.R. Sociology 140 General Sociology

TOTAL hours required in Area B	13-16
Area C. Humanities	
One or two of the following:	-6
One or two of the following:  Art 102 Introduction to Art  Music 150 Music Appreciation  Drama 221 Introduction to the Theatre  Philosophy 280 Introduction to Philosophy  Art 301 or Art 302 Art History	3-6
TOTAL hours required in Area C	9
Area D. Natural Science Biology 101 General Biology	5
Physics 125 Fundamentals of Physical Science	5
*any five hour course in physics	10
Area E. Health and Physical Education HPER 101 & 102 Introduction to Physical Activity or two additional Physical Education Activity courses	-
TOTAL hours required in Area E	4

\* Must have departmental permission

Notes: (1) All freshmen must enroll each semester in English and physical education until the general education requirements in these areas are fulfilled.

(2) A more advanced course may be substituted in any area above with the permission of the department responsible for the general education course.

#### C. Special Rules Common To All Baccalaureate Degrees.

- 1. A student who transfers sixty or more semester hours to this college must complete the general education requirement but is exempt from physical education requirements. A student who transfers less than sixty semester hours of work to the lower division will have one hour of physical education excused per each 15 semester hours of credit transferred.
- 2. No Bachelor of Arts or Bachelor of Science in Education degree may require more than 50 semeter hours of course credit for a major area of concentration (major subject plus related courses). No Bachelor of Science degree may require more than 55 semester hours of course credit for a major area of concentration (major subject plus related courses). A student may elect to take courses in his major beyond these limits but may not be required to take such courses. However, no more than 60 semester hours in any one major may be counted toward a degree.
- 3. A student must earn thirty of this final thirty-six semester hours in residence at this College.
- A student must complete a minimum of 12 semester hours of his major area requirements in courses numbered 300 and above.
- Each degree candidate must file credentials in the Placement Bureau.
- 6. Each student must make application for a degree no later than six weeks after his registration in the last semester of the school year in which he is to receive the degree. This is to be done in the Office of the Registrar.
- 7. Any student who expects to take an undergraduate degree in any Missouri state college must satisfactorily complete a course in United States History which includes study of institutions, national and state government. This requirement may be satisfied by History 104 or any course in national or state government.
- A student may not offer by correspondence or extension more than one fourth of the total hours required for any Baccalaureate degree.
- 9. Credit in educational methods courses and student teaching can be applied only to the B.S. in Education degree.

#### II. DEGREES OFFERED

### A. Bachelor of Arts Degree

1. This degree is offered those students desiring a liberal preparation in the humanitities or social sciences. Students are required to complete a minimum number of semester hours specified by the department of his major area of concentration. In each case, the minimum shall be in excess of 30 semester hours.

This degree is available in:

- a. English
- b. History
- c. Music
- d. Political Science
- e. Speech and Drama

A student must also satisfactorily complete a minimum of 10 semester hours or the equivalent of a single foreign language.

3. A student is required to present a minimum of 15 semester hours in courses which support his major area of concentration (minor). This supporting area is to be approved by the student's advisor.

- 4. The student must complete a minimum of 12 semester hours in area C of the general education requirements.
- 5. A student must complete the departmental requirements.

### B. Bachelor of Science Degree

1. This degree is offered those students who desire intensive academic preparation within an area of concentration. A student must complete a number of semester hours as specified by the department of his major area of concentration. In each case the minimum shall be in excess of 36 semester hours.

This degree is available in:

- a. Biology
- b. Chemistry
- c. Business Administration
- d. Mathematics

 A student must complete the departmental requirements which may also require supporting courses in areas related to the major area of concentration.

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#### C. Bachelor of Science in Education Degree

 This degree is offered those students desiring to teach in the elementary or secondary school. Completion of the requirements will qualify a person for life certification in Missouri.

A student must select a major area of concentration from:

a. Elementary Education

- b. Major or minor areas of concentration at the Secondary level.
  - (1) Art 50 Science

(3) Business(4) English

(5) Foreign Language (Spanish)

(6) Mathematics

(7) Music

(8) Health, Physical Education and Recreation

(9) Physical Science

(10) Speech and Drama

c. A special program is available which makes it possible to qualify to teach music or physical education at both the elementary and secondary levels. Information can be obtained from either department concerned.

A student specializing in elementary education must complete these additional or specific general education courses:

a. Biology 302, Field Biology

b. One additional course in mathematics

- c. A course in geography must be selected in Area B.
- 3. A student emphasizing secondary education must complete departmental course requirements under either Option A or Option B as shown below:

Option A. Two teaching fields requiring not less than the minimum requirements of the Missouri State Department of Education for secondary school teaching and not more than thirty-six hours each. (Option A is not available in social science, music, or for programs preparing teachers for both elementary and secondary certification.) Courses counted toward the fulfillment of general education requirements must be included in the thirty-six hours.

Option B. One teaching field, or area of concentration, of (1) not fewer than thirty-six semester hours and up to fifty semester hours and (2) in addition, up to twenty-one semester hours in a related field or fields is suggested. The twenty-one hours in a field will allow a person to be certified for grades seven-nine. Courses in general education may be included in the required programs for the first teaching field if departments wish to do so. General education courses must be included in the related field.

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Each Department which prepares students for secondary teaching has developed a program of courses to be taken for the options available in that department.

4. A student must complete the professional education coure requirements as listed in the section relating to the Teacher Education program.

## TEACHER EDUCATION PROGRAMS

The preparation of teachers and educational specialists at Missouri Southern College is recognized as an all-college responsibility by the faculty. The purpose of the Division of Education, Psychology, and Physical Education to promote overall coordination of the program of teacher education and to provide specific course work in the field of professional education, psychology, and physical education.

There are several principles on which the program of teacher education is based. These are:

- 1. A teacher should be provided a broad general education.
- 2. A teacher should be required to demonstrate an acceptable degree of mastery in his specialized teaching fields.
- 3. A teacher should possess the personal qualities that can be identified as essential for effective teaching.
- 4. A teacher should possess the professional competences necessary to serve his profession effectively.

Through the program of teacher education, the College seeks to achieve these objectives:

- 1. To provide graduates of secondary schools in the College service area with information on teaching as a profession.
- 2. To identify and attract to the program of teacher education students who possess the intellectual and personal qualities necessary to become effective teachers.
- 3. To provide a program of studies that will develop graduates capable of assuming duties as teachers in the elementary or secondary schools.
- 4. To cooperate with local, state, regional, and national agencies that have as their aim the improvement of education.
- 5. To assist schools, boards of education, and other educational groups in problems relating to educational programs.

#### Degree Programs

The Division of Education, Psychology and Physical Education offers an undergraduate major leading to the degree, Bachelor of Science in Education. The division also administers the department of physical education and recreation and offers a teaching major at both the elementary and secondary levels in this field.

Students who later plan to teach in elementary and/or secondary schools should work toward the degree, Bachelor of Science in Education. Satisfactory completion of the requirements for this degree entitles the graduate to a teaching certificate for the State of Missouri. Recipients of other degrees must meet the detailed requirements specified by the State Board of Education.

In working toward the degree, Bachelor of Science in Education, the student may specialize in elementary education or in secondary education. If preparation for teaching on the elementary level is desired, the student should emphasize kindergarten-primary grades or the intermediate grades. In either case, the major field of study is elementary education.

A student who selects the secondary level of teaching, with the objective of working in high school or junior high school, will choose a teaching field or teaching fields in accordance with one of the two optional patterns described later. A student interested in secondary teaching will major in an academic field of specialization other than education. Each student is encouraged to devote his freshman year to an exploration of his interests and abilities so that his final choice will reflect sound and mature judgment.

#### Advisement

Each student will be assigned to an advisor who will help plan the program of studies and will assist the student in every way possible. Elementary majors will have advisors assigned by the Division of Education, Psychology, and Physical Education; students in secondary fields will have advisors assigned by the department in which the student chooses to specialize.

The Division of Education, Psychology, and Physical Education will provide information concerning certificate requirements, employment opportunities, sequence of professional courses, supervised teaching assignments, and admission to teacher education.

#### Admission to Teacher Education

Although all graduates of accredited high schools are eligible to enter the College, not all students are eligible for admittance to candidacy for the degree, Bachelor of Science in Education, which leads to a teaching certificate. College authorities will work carefully with interested students to help them identify qualities which point to success in the teaching profession.

The student who is planning to qualify for a teaching certificate will make application for admission to the teacher education program on a form provided for this purpose. The form may be obtained from the Division of Education, Psychology, and Physical Education. Application may be made during the second semester of the sophomore year and must be made not later than the first semester of the junior year.

Each application will be reviewed by a committee which includes the Director of Teacher Selection, the Chairman of the Division of Education, or the head of the Department of Elementary Education or the Department of Secondary Education when appointed, the Director of the Placement Bureau, and (in the case of secondary majors) the heads of the departments or divisions in which the applicant is specializing.

The application is supplemented by the following information:

- 1. Results of tests taken at the time of entrance to the College or later:
- 2. Record of scholastic work completed;
- 3. Indication of an acceptable level of proficiency in the English language;
- 4. Record of experiences with children and youth;
- 5. An autobiography prepared by the applicant;
- 6. Indication of sound physical and mental health;
- 7. References obtained from faculty members and other appropriate individuals.

As a result of the review of the application, the student will be (1) approved for admission to the teacher education program, (2) approved on condition that certain requirements be met, (3) or advised not to continue in teacher education. The student must have been approved before he can be admitted to professional courses ordinarily scheduled in the junior year.

A minimum grade-point average of 2.1 is required for admission to teacher education. Furthermore, a minimum grade-point average of 2.2 and a grade-point of at least "C" in the Educational Psychology course is required for admission to supervised teaching, which is scheduled during the "Professional Semester" of the senior year. Exceptions to this requirement will not be allowed unless approved by the Teacher Selection Committee.

### Specific Requirements

In addition to the general requirements for all baccalaureate degrees, specific requirements for the degree, Bachelor of Science in Education, have been established. These requirements fall into three areas: (1) General Education, (2) Specialized preparation in teaching fields, and (3) Professional Education.

1. General Education—The student must complete the general education requirements of the College, plus certain additional courses indicated on the list under "Course Requirements" by each department.

2. Specialized Preparation in Teaching Fields—Candidates for the degree, Bachelor of Science in Education, specialize in either elmentary or secondary education. Those students desiring to teach at the secondary level may select from the following major areas of concentration: art, biology, business education, English, foreign languages, mathematics, music, physical education, physical science, social science, and speech and drama.

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In choosing a teaching field, a student interested in elementary schools will select "Elementary Education" as a major. Those interested in secondary education will select one of the following optional plans:

Option A. Two teaching fields requiring not less than the minimum requirements of the Missouri State Department of Education for secondary school certification and not more han thirty-six hours credit. (Option A is not available in social science, music, or for programs preparing teachers for both elementary and secondary certification.) Courses counted toward the fulfillment of general education requirements must be included in the thirty-six hours.

Option B. One teaching field, or area of concentration, of (1) not fewer than thirty-six semester hours and up to fifty semester hours, and, (2) in addition, up to twenty-one semester hours in a related field or fields is suggested. The twenty-one hours in a field will allow a person to be certified for grades seven-nine. Courses in general education may be included in the required programs for the first teaching field if departments wish to do so. General education must be included in the related field.

Each department which prepares students for secondary teaching has developed a program of courses to be taken by students who choose to follow Option A or Option B. The student may obtain a copy of this program from the department. Option B is mandatory for majors in social science and music.

3. Professional Education—the following sequence of courses is to be completed by students planning to teach on the secondary or elementarfy level:

#### Junior Year:

Educ 330	Teaching in the Secondary School		
or Educ 320	Basic Methodist of Elementary School	5	hours
Psyc 310	Instruction Educational Psychology	3	hours

#### Senior Year:

One semester of the senior year is devoted to a "Professional Semester." During the professional semester, the student will do supervised teaching during one-half of the semester (approximately nine weeks) and will carry three, three-hour courses during the other half of the semester. No additional course work may be carried except on an evening or Saturday basis. Courses to be taken during the professional semester are:

### Secondary Teaching

Educ 490 Educ 430	Student Teaching, Secondary Legal and Professional Responsibilities of	
Educ 405	Educators History and Principles of Education	3 hours

Psyc 411	Measurement and Eavluation in Education	3	hours
Or Psyc 202	Adolescent Psychology	3	hours
Elementary Teach	ing		
Educ 480	Student Teaching, Elementary	6	hours
Educ 430	Legal and Professional Responsibilities of Education	3	hours
Educ 405	History and Principles of Education	5	hours
Psyc 411	Measurement and Evaluation in Education		hours
Educ 420	Foundations of Curriculum Development	3	hours
Elementary and S	Secondary Teaching		
For students levels the following mended:	desiring certification at both Elementary and Seng sequence of professional education courses ar	e i	recom-
Junior Year:			
Psyc 310			
1 3yC 310	Educational Psychology	3	hours
Educ 330	Educational Psychology	3 5	hours hours
,	Educational Psychology	3 5	hours
Educ 330	Teaching in the Secondary School	5	hours
Educ 330 Senior Year:	Teaching in the Secondary School  Student Teaching Elementary	5	hours
Educ 330 Senior Year: Educ 481	Teaching in the Secondary School	3 3	hours hours
Educ 330 Senior Year: Educ 481 Educ 493	Student Teaching Elementary  Student Teaching Secondary  Legal and Professional Responsibilities  of Educators	5 3 3	hours hours hours
Educ 330 Senior Year: Educ 481 Educ 493 Educ 430 Educ 405	Student Teaching Elementary  Student Teaching Secondary  Legal and Professional Responsibilities	5 3 3 3	hours hours hours
Educ 330 Senior Year: Educ 481 Educ 493 Educ 430	Student Teaching Elementary  Student Teaching Secondary  Legal and Professional Responsibilities  of Educators  History and Principles of Education	3 3 3 3	hours hours hours hours hours

#### Home Base College

It is strongly recommended by the State Department of Education that all persons making application for teacher certification designate a home base college. The designated college is responsible for certifying to the State Department of Education that a person has fulfilled the necessary requirements for cerification. To have Missouri Southern College designated for this purpose, a person must be admitted to the Teacher Education Program. Transcripts will be so worded as to indicate work completed at Missouri Southern College and work completed at other institutions if no degree is obtained from Missouri Southern College.

## DIVISION OF EDUCATION, PSYCHOLOGY, HEALTH, AND PHYSICAL EDUCATION

Chairman: Dr. Charles F. Niess

Education: Lloyd Dryer, Charles Niess

Psychology: Floyd Belk, Lloyd Dryer, John Eli, Sam Starkey

Health, Physical Education, and Recreation: Douglas Landrith, Sam Starkey, Dudley Stegge, Ronald Toman, Venus Yount

The division is composed of four departments: Elementary Education, Secondary Education, Pychology, and Health, Physical Education, and Recreation.

Students planning to teach in the elementary or secondary schools should work toward the degree of Bachelor of Science in Education. Candidates for this degree should consult the area of this catalog relating to Teacher Education. Those with a specialized field at the secondary level should also consult the specimic department in which they plan to concentrate.

Candidates for the degree, Bachelor of Science in Education, with a major in elementary education, in addition to other course, must select an area of concentration from: science (biological and physical), mathematics, social sciences, language arts, fine arts (music and art), or health and physical education. A minimum of twenty-one semester hours will be required for an area of concentration for elementary majors. This twenty-one hours in a field may also allow a teacher to teach the subject at the seventh, eighth, and ninth grade levels. Courses taken to satisfy the general education requirement may also be applied toward fulfilling the area of concentration requirement.

#### COURSE REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE IN EDUCATION WITH A MAJOR IN ELEMENTARY EDUCATION:

Course Num	ber Course Title	Credit	Hours
Biol 302	Field Biology		2
Psyc 201	Child Psychology		3
Engl 210	Children's Literature		
Mus 260	Music for the Elementary School		
Art 203	Art Education		3
Hper 372	School and Comm. Health		3
Hper 311	Phy. Educ. for Elem. Teachers		
Educ 313	The Exceptional Child		2
Educ 317	Arithmetic for Teachers		
Educ 318	Science for Teachers		
Educ 355	Teaching Lang. Arts and Reading		
Educ 375	Instructional Media		2

One of the Following:  Engl 202 Exposition (3)  Engl 305 Structure of Amer. En One of the Following:  Engl 207 or 208 English Literat  Engl 307 or 308 American Literat  One elective in Math in excess of requirement.	glish (3) 	
requirement.		
	27	7-38 hours
Suggested order of study:	37	36 Hours
First Year	Second Year	
Engl 102 Composition       3         Engl 103 Composition       3         Psyc 101 General Psychology       3         Biol 101 General Biology       5         Hist 104 History of U.S.       5         Math 103 Modern Math       3         Art 102 Introduction to Art       3         Hper 102 Intro. to P. E. I       1         Hper 102 Intro. to P. E. II       1         Pol. Sci 222 State Government       2         Electives       3-5	Engl 207-208 English Lit Psy Sci 125 Fund. of Phy. Hist 203 or 204 European Mus 260 Music for Elem. Seog 220 Regions and Na Psyc 201 Child Psycholog Sp 101 Techniques of Sp Engl 210 Children's Liter Electives Health or P. E. Ecctives in Health or P. E.	Sci 5 History 3 School 3 stions 3 y 3 ature 3 ature 3
Toetal 32.34	Total	33-34
Third Year	Fourth Year	
Engl 305 Struct. of Amer. Engl. or Engl 202 Exposition	Hper 372 School Comm. I Biol 302 Field Biology Educ 375 Instructionad M Educ 313 Exceptional Chi Professional Semester: Educ 400 Student Teachi Educ 430 Legal and Prof. Educ 405 Hist. and Princip Education	2 dedia 2 ild 2 ild 2 mg 6 Resp. 3 ples of 3 in Ed. 3
Total 31-34	Total	30-33

## DEPARTMENT OF HEALTH, PHYSICAL EDUCATION, AND RECREATION

The Department of Health, Physical Education, and Recreation provides the basic physical education requirements for all students as well as supervising both the women's and men's intramural sports programs. The department also offers courses for a major and minor area of concentration in the field of health, physical education, and recreation for both women and men desiring the degree, Bachelor of Science in Education.

Curricular programs are offered that lead to certification to teach health, physical education, and recreation in either or both elementary and econdary schools in Missouri. Students enrolling for this degree should select a program under "Option B" if he plans to teach at both the elementary and secondar y level or under "Option A" if he plans to teach only in secondary schools. Students choosing "Option A" must also qualify for a second teaching field. The second field should be selected from: art, biology, business education, English, a foreign language, mathematics, or physical science. The student should consult the specific department concerned for the requirements of the second teaching field selected.

# COURSE REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN EDUCATION WITH A MAJOR IN MEN'S PHYSICAL EDUCATION AS A SINGLE TEACHING FIELD:

Course Num	ber Course Title C	redit	Hours
Psyc 201	Child Psychology		3
Psyc 205	Psychology of Personal Adjustment		3
Biol 202	Human Anatomy		5
Hper 150	Foundations of Phys. Ed. I		4
Hper 151	Foundations of Phys. Ed. II		4
Hper 312	Phys. Ed. in Elementary Schools		2
Hper 345	Kinesiology		3
Hper 434	Administration of Extra-Class Programs in Physical Education		2
Hper 455	Organization and Administration of		3
Hper 265	Advanced Swimming and Water Safety		2
Hper 372	School and Community Health		3
Hper 433 Hper 391	Administration of Interscholastic Athletics Recreational Leadership		3
	or		
Hper 346 Hper 285	Organization of Adapted Physical Education First Aid and Safety		3
	or		
Hper 348	Care and Prevention of Injuries  Eight hours selected from:		9
Hper 451	Coaching Football		2
Hper 542	Coaching Basketball		2
Hper 453	Coaching Track		2
Hper 420	Teaching and Supervising of Sports I		3
Hper 421	Teaching and Supervising of Sports II		3
Hper 355	Rhythmic Form and Analysis		2
	Total		48

(Students planning to teach in elementary schools should select at least one of: 420, 421, 355)

COURSE REQUIREMENTS FOR TEACHING MEN'S PHYSICAL EDUCATION WHEN A SECOND TEACHING FIELD IS DESIRED: (OPTION A)

Course Num	ber Cour	se Title	Credit Hours
Biol 220	Human Anatom	у	5
Hper 150	Foundation of Pl	nysical Ed. I	4
Hper 151	Foundation of P	hysical Ed. II	4
Hper 345		***************************************	
Hper 455	Organization and	Administration	3
	of Physic	al Education	
Hper 372	School and Com	nunity Health	3
Hper 265	Advan. Swimmir	ng and Water Safety	2
**	(or 2 acti	vity credits in swimming)	
Hper 391	Recreational Lead	dership	3
Hper 433		f Interscholastic Athletics	
Hper 285	First Aid and Sa	fety	3
TT 240	or		
Hper 348	Care and Prevent		
TT	Six hours selected		
Hper 451	Coaching Footba	11	2
Hper 452		ball	
Hper 453	Coaching Track	· · · · · · · · · · · · · · · · · · ·	2
Hper 420	Teaching & Supe	ervising of Sports I	3
Hper 421	Plant - P	ervising of Sports II	3
Hper 355	Knythmic Form	& Analysis	2
	Total		36
Suggested Or	der of Study Men	's (Option B) Physical Ed	ucation:
I	First Year	Second	Year
Math 103 or 1 Hist 104 Histo Hper 150 Fund Hper 151 Fund Biol 101 Gener Sp 101 or 201	d 103 Composition 13 Modern Math ry of U.S d. of P.E. I d. of P. E. II ral Biology Tech. of Speech lth Education	Phys 125 Fund. of I Po Sc 120 U.S. Gov Hist 203 European Engl 106 Masterpiec Psyc 101 General P Phil 280 Intro. to P Hper 265 or 112 & Biol 220 Human An Psyc 201 Child Psy Mus 150 Masterpiece	### Arment
Total		32 Total	33
T	hird Year	Fourth	Year
Hper 345 Kind Hper 420 Teach Hper 355 Phy. Hper 348 Care	Elem. School	Hper 455 Organ. & Hper 452 Coaching Hper 434 Adm. of Prgram in P. E. Hper 372 or 433 Sci Health	Basketball 2 Extra-Class 2
Hper 391 or 34	46 Rec. Leadership	3 Electives	6-8
Hper 451 Coac	ching Football	2 Professional Education	on Semester (15)

Educ 330 Teachi	tional Psychology ing in Sec. Schools 4	3 5 5	Educ 430 Legal & Pro Educ 405 Hist. & Pr Educ 411 Meas. & I Educ 430 Fund. of C or Phyc 201 Adoles. Educ 481 St. Teachin Educ 493 St. Teachin	in. of Educ. 3 Eval. (3), or 3 urr. Devel. (3), Psychology (3) ag Elem 3
T . 1	22	2.2		31-33
Total	32-	3 3		31 33
COURSE FIELD IN PH	REQUIREMENTS	NTS I	FOR A SINGLE N FOR WOMEN:	TEACHING (OPTION B)
Course Number	er Cours	e Title		Credit Hours
Psyc 201 (	Child Psychology			3
Biol 220	Human Anatomy	,		5
Psyc 205 I	Psychology of Pe	rsonal .	Adjustment	3
Hper 150	Foundations of Pl	hysical	Education I	4
Hper 151	Foundations of P	hysical	Education II	4
Hper 265	Advanced Swimn	ning an	d Water Safety	2
Tipel 207	(or 2 acti	vity co	urses in swimming)	
Hper 312	Physical Education	n for t	he Elementary Sch.	2
Hper 285	First Aid and Saf	etv		3
Hper 345	Kinesiology			3
Hper 355	Rhythmic Form	and Ar	alysis	2
Hper 434	Adm of Extra-C	lass Pro	o. in Phys. Ed	
Hper 455	Org and Adm	of Phys	sical Ed.	
Hper 420	Teaching and Su	ner of	Sports I	3
Hper 421	Teaching and Su	per of	Sports II	
Hper 372	School and Com	munity	Health	
Hper 391	Recreational Lead	dership		3
11per 391	Or	acromp		
Hper 346	Org. of Adapted	Phys	Fd	_
11per 340	Total	I Hys.	LG.	48
	Total			, 0
Suggested Or	der of Study Wo	men's	Physical Education	Option B:
F	irst Year		Second	Year
	03 Composition	6	Phys 125 Fund. of I	Phy. Sci 5
Math 103 or 11	3 Modern Math	3	Po Sc 120 U.S. Gov	vernment 3
Hist 104 Histor	ry of U.S	5	Hist 203 European	History
Hper 140 Fund.	of P. E. I	4	Engl 106 Masterpie Psyc 101 General P	
	al Biology	5	Phil 280 Intro. to Pl	
Sp 101 or 201	Tech. of Speech	3	Hper 265 or 112 &	212 Swimming 2
Hper 162 Heal	th Educ	2	Biol 220 Human An	
			Psyc 201 Child Psy Mus 150 Masterpiece	
		_		
Total		32	Total	33
TI	hird Year		Fourth	Year
	Elem. School	3	Hper 455 Orig. and	Adm. of P. E. 3
Hper 345 Kines	siology	3	Hper 434 Adm. of	Extra-Class

Hper 421 Ter Hper 355 Rhy Hper 285 Fir Psyc 205 Psy Educ 330 Ter	aching & Supv. II ythm, Form & Analysis st Aid and Safety c. of Personal Adj.	Hper 372 School & Hper 391 or 346 R Professional Educati Educ 430 Legal & F Educ 405 Hist & Pr	ec. Leadership 3 ion Semester (15) rof. Resp. of Ed 3 in. of Educ 3 cval. (3) or Curr. Devel. (3) Psychology (3) 3 ning Elem 3 ning Sec 3		
Tota	al 32-33	Total	32-34		
PHYSICAL	SE REQUIREMEN LEDUCATION WH D: (OPTION A)	TS FOR TEACHIN HEN A SECOND TEA	G WOMEN'S CHING FIELD		
Course Nun		Tial.	Cualit Hanna		
_			Credit Hours		
Psyc 220	Human Anatomy	· 1 T2 1 T	5		
Hper 150	Foundation of Phy	sical Education I	4		
Hper 151		sical Education II			
Hper 345	Kinesiology 3				
Hper 455	Organization and Administration of Phys. Ed 3				
Hper 372	School and Comm	unity Health	3		
Hper 285	First Aid and Safe	ety	3		
Hper 355	Rhythmic Form an	d Analysis (2)	2		
TT 0.00	or				
Hper 265	or	ng and Water Safety (	2)		
Hper 420	(2 activities course				
Hper 421	Teaching and Supe	ervision of Sports I	3		
Hper 391	Paranting and Supe	rvision of Sports II	3		
11per 391		rship (3)	3		
Hper 346	Organization of A	dapted Physical Educati	on (3)		
	Total		36		
COURS SIRING TO HIGH LEV	TEACH PHYSICA	S FOR A MAN OR AL EDUCATION AT	WOMAN DE- THE JUNIOR		
Course Num	nber Course	Title	Credit Hours		
Hper 150	Foundation of Phy-	sical Education I	4		
Hper 151	Foundation of Phy	sical Education II	4		
Hper 285	Safety and First A	id	3		
Hper 455	Organization and	Administration of Phys.	Ed 3		
Hper 372	School and Commi	inity Health	Ed 3		
-F 0/2	control and commit	mity Health	4		

#### Select any two of the following:

Course Numb	oer Course The	Hours
Hper 451 Hper 452 Hper 453 Hper 420 Hper 421 Hper 355	Coaching Football Coaching Basketball Coaching Track Teaching and Supervision of Sports I Teaching and Supervision of Sports II Rhythmic Form and Analysis Total	 2 2 2 3 3 2 21-22
		 21-22

### DIVISION OF BUSINESS AND ECONOMICS

Chairman - Mr. L. Keith Larimore

Accounting: Dorothy Stone, John Gilmore, Kathryn Koger Economics and Finance: L. Keith Larimore, John Gilmore

General Business: Clarence Cowan, John Gilmore

Marketing and Management: L. Keith Larimore, John Gilmore Office Administration: Lorine Miner, Clarence Cowan, Kathryn Koger

There are three major objectives of the Division of Business Administration: (1) Preparing individuals for positions of responsibility and, leadership in industry and government; (2) Preparing individuals to teach business subjects on the secondary level; and (3) Preparing individuals to enter the business community, obtain initial employment, and perform satisfactorily on the operative level in an organization.

It is the primary purpose of the Division of Business Administration to develop initially and improve continuously the caliber of instruction, programs, and courses which will achieve these objectives and thereby fulfill the educational needs of the individuals previously mentioned.

#### Degree Programs

The Division of Business Administration offers two baccalaureate degrees. These are a Bachelor of Science in Business Administration and a Bachelor of Science in Education with a major in business. In addition, several short-term business programs are offered, and these programs are directed by the Division of Semi-Professional and Technical Education.

In addition to the general education requirements of the college for the Bachelor of Science Degree, the student must also complete certain requirements in business. Students pursuing a Bachelor of Science in Education Degree with a major in business must complete the General Education requirements of the college plus additional specific course requirements set out in options A and B in the Teacher Education Program.

#### REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN BUSINESS ADMINISTRATION

Course Number	Course Title Cred	it Hours
GB 101	Introduction to Business	2
Acct 101-102	Accounting	. 3
Econ 201-202	Principles of Economics	6
GB 120	Business Communications	2
Econ 301	Money and Banking	3
GB 301-302	business Law	6
Mgmt 350	Business Organization and Management	3
Mgmt 301	Principles of Marketing	3
Fin350	Corporate Finance	2
Math 315	Statistics	3
Mgmt 355	Personnel Management	3

An additional twelve hours of business courses of which at least three hours are in each of the following departments: Economics & Finance; Marketing & Management; General Business 12

54

Students desiring to specialize in accounting or marketing and management should follow the suggested programs in these specialized areas. Students can, with the approval of their advisors, substitute the courses in the specialized programs for the additional twelve hours previously cited. All students pursuing a Bachelor of Science Degree with a major in Business Administration, whether in a general or specialized program, must complete the General Business Requirements.

### SUGGESTED PROGRAM OF ADDITIONAL COURSES FOR SPECIALIZATION IN ACCOUNTING AS A SUPPORTING AREA

	it Hours
General Business Requirement	
*Accounting (additional)	18

\*Specific courses include:

Acct 201, Intermediate Accounting; Acct 202, Cost Accounting; Acct 301, Advanced Accounting; Acct 310, Consolidated Statements; Acct 401, Tax Accounting; Acct 410, Auditing.

#### SUGGESTED PROGRAM OF ADDITIONAL COURSES FOR SPECIALIZATION IN MARKETING AND MANAGEMENT AS A SUPPORTING AREA

Cre	edit Hours
General Business Requirement	42
*Business Courses (additional)	
*Specific courses include:	10
Mktg 310, Retailing; Mktg, 320, Advertising; Mg	mt 415 Ma
Management: Mamt 260 De-1-4: M	int +1), Ivid.

Management; Mgmt 360, Production Management; Mgmt 395, Business Policy, to equal 12 hours; Electives in Business, 6 hours.

Suggested order of study:

First Year Enfl 102 Comp Engl 103 Comp Hist 104 History of U.S Psyc 101 General Psychology HPER 101 & 102 Intro. P. GB 101 Intro. to Bus. Acct 101 & 102 Accounting Math 103 or 113 or equival Electives	3 5 7 3 E 2 3 3 6	Second Year  Biol 101 Biological Sci or Equivalent  Phys 125 Fundamentals of Physical Science Sp 101 Techniques of Speech Engl 106 & 107 & 207 or 208  Mus 150 Music Appreciation Econ 201 & 201 Prin. of Economics GB 120 Business Communications HPER 162 Health Education Electives	3 3 6 3 2
Total	31-33	Total 3	33

Third Year		Fourth Year	
Hist 203 European Hist or Geo. 220 or Soc. 140	3 6 3	Econ 301 Money & Banking Econ 350 Corporate Finance PoSc 120 U.S. Government MgMt 355 Personnel Management Elective in Economics Elective in Marketing & Mg Elective in General Business	3 3 3 3 3
Electives	9	Electives	9
Total	30	Total	30

NOTE: Individuals desiring to specialize in either Accountin gor Marketing and Management should see the suggested curriculum for these two specialized areas. The additional courses suggested for these two areas of specialization should be taken as electives. Courses taken for specialization are in addition to General Education Requirements and General Requirements in Business.

# COURSE REQUIREMENTS FOR A BACHELOR OF SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN BUSINESS AS ONE OF TWO FIELDS (OPTION A)

Course Number	Course Title Ci	edit Hours
*	Typewriting	6
aje	Shorthand	6
Acct 101-102-201	Accounting	9
Econ 201-202	Economics	6
	Elective in Business (No. 300 or above)	3
		30

# COURSE REQUIREMENTS FOR A BACHELOR OF SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN BUSINESS AS A SINGLE TEACHING FIELD (OPTION B)

Course Number	Course Title Credi	t Hours
GB 110	Office Machines	3
sje	Typewriting	6
*	Shorthand	6
Acct 101-102-201	Accounting	9
Econ 201-202	Economics	6
GB 301-302	Business Law	6
Mgmt 350	Business Organization and Management	3
	Elective in Business (No. 300 or above)	3

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Suggested order of study: For the B. S. in Education Degree With a Major in Business (Option "A" and "B")

First Year	Second Year
Engl 102 and 103 Composition       6         Hist 104 History of U.S.       5         Math 103 or 113 or equivalent       3         Psyc 101 General Psychology       3         Acct 101 and 102       6         Sp 101 or 102       3         Phy Ed. 101 and 102       2         *Typewriting or Shorthand       3	General Biology 101 or equivalent       5         Phys 125 or equivalent       5         Engl 106 or 107 or 207 or 208       6         Music 150, Art 102, Drama 221,       3         or Philosphy 280       3         Accounting 201       3         Econ 201 and 202 (Principles       6         *Typewriting or Shorthanr       3         Health Education 162 or two       3         activty courses       2
3 1	33
Third Year  Political Science 120 or 222 2-3 Psyc 310 General Psychology 3 Educ 330 "Teaching in Secondary Schools" (Note: *Business Teaching Techniques is included) 5 *Typewriting or Shorthand Electives (Should meet requirements for two teaching fields—see details option "A")	Fourth Year  Professional Education Semester (2nd)
Third Year	Fourth Year
Political Science 120 or 222	Professional Education Semester 15 Elective in Business (No. 300 or above)
31-32	30

\*NOTE: It is not necessary for a student to meet the Shorthand requirements if he wishes to teach only those Business Education subjects in which Shorthand is not involved. He must have at least 30 hours in Business Education and meet the requirements in the courses for which certification is desired.

If a student has been excused from a beginning Typing or Shorthand course on the basis of proficiency tests, his transcript must so indicate (Minimum 30 semester hours requirement must be met.)

# DIVISION OF HUMANITIES AND FINE ARTS

Chairman - Dr. Ervin J. Dunham

Art: Arthur Boles, Darral A. Dishman

English: Marie L. Bickett, Jane Blades, Enid B. Blevins, Larry D. Dunham, Barbara N. Frizzell, Cleetis Headlee, Gwen T. Hunt, Grace Clayton Mitchell, Alfred H. Rogers, Bobbie Z. Short, Ima J. Van Natter, Ruby A. Wiley.

Foreign Languages: Enid B. Blevins, Lillian Spangler, Ruby A. Wiley.

Speech and Drama: Milton W. Brietzke, Duane Hunt.

Music: Ervin J. Dunham, Oliver Sovereign, William L. Taylor.

Applied Music: Marguerite Carney, William Elliott, Sara Anne Gilstrap, Marie A. Guengerich, Robert A. Harris, Mary Helen Harutun, William J. Lebedeff, James R. Norman, Mary Bingham Porter, Lorraine Riley, Robert Sovereign.

The Division of Humanities and Fine Arts comprises those areas of learning in which the student is made aware of some of Mankind's greatest thought and noblest art. Through the study of literature, language, speech, art, music, and drama, the student enlarges his capacity to express himself and at the same time develops his ability to comprehend and appreciate the creative efforts of others.

The Division consists of five separate departments, distinct in that each is a specific discipline or area of study and yet related in that all are concerned with creative self-expression.

- A. Viewed in relation to the total college curriculum, the functions of the departments comprising the Division (English, foreign languages, speech and drama, music, and art) are clearly two-fold, as follows:
- 1. General Education—Certain courses offered in every area of Humanities and Fine Arts are especially designed to make available to each student, regardless of his specialization, skills and understanding which greatly add to his personal development. (a) Through courses in English and speech he will increase his ability to read, write, and speak his own language and deepen his understanding of its literature. (b) Through courses in journalism he will learn techniques of reporting and styles of writing appropriate to today's mass media of communication. (c) Through courses in foreign languages he will learn to communicate with people of other nations and to appreciate the intellectual contributions of other cultures than his own. (d) Through participation in courses in public speaking and drama he will develop poise and power of oral expression, both persuasive and interpretive. (e) Through a guided study of the masterpieces of music and art he will acquire an enriched enjoyment of the world's treasures in those specialized areas of aesthetic expression.

- 2. Areas of Concentration—Detailed study, progressing from elementary through advanced courses, will give high level of competency in understanding and performing in disciplines which students elect as Areas of Concentration. (a) Programs in art, English, foreign languages, speech, drama, and music are necessary for the preparation of students planning to teach these subjects and form major areas for candidates for the Bachelor of Science in Education Degree. (b) A lesser concentration in several of these areas is required for a Bachelor of Science in Education Degree with a major in Elementary Education. (c) Students not planning to teach but desiring competency in one of these areas may elect to receive a Bachelor of Arts Degree, either for personal enrichment or as preparation for graduate study.
- B. In addition to curricular functions, the Division exerts a strong influence upon the cultural life of the college and community.
- 1. The musical and dramatic performing organizations offer opportunities for participation to all qualified students (and in some instances to members of the larger community), thus serving as a valuable outlet for aesthetic self-expression.
- 2. The regular publication of the college newspaper not only provides practical experience for students interested in journalism but also serves the college community and alumni with timely and interesting reports of college activities.
- 3. Displays of art works by students and faculty in the Art Gallery and in exhibitions elsewhere are stimulating to the artistic community and are excellent media for improved public relations.
- 4. The services of members of the faculty of all departments (as speakers, critics, judges, and performers) to community organizations—whether professional, cultural, religious, or social—aid in acquainting the public with the programs of the college.

#### ART

The Department of Art offers courses which lead to the degree of Bachelor of Science in Education. The Department is housed in new, well-equipped quarters in the Fine Arts Complex, including four large studios and a spacious exhibition gallery.

### COURSE REQUIREMENTS IN ART LEADING TO THE DEGREE OF BACHELOR OF SCIENCE IN EDUCATION

Option A: Art as one of two teaching fields

Course N	Tumber Course Title Credit	Hours
Art 101	Art Composition	3
Art 102	Introduction to Art	3
Art 103		3

Art	104	Drawing Techniques	3
Art	105	Introduction to Design	3
Art	203	Art Education	3
Art	204	Basic Form	3
Art	205	Painting	3
Art	301	and 302 Art History	6
Art	303	Drawing or	
Art	304	Watercolor	3
Art	305	Sculpture	3
			36

A student wishing to be certified to teach art in both Elementary and Secondary schools should add to the above the following courses: Educ 201, Child Psychology.

Suggested order of study:

First Year	Second Year
Eng 102 and 103 6 Psyc 101 3 HPER 101 and 102 2 Eng 107 or 108 3 Art 101 3 Art 102 3 Art 103 3 Art 104 3 Art 105 3 Math 103 3	Sp 101       3         Hist 104       5         Biol 101       5         HPER 162       2         Art 203       3         Art 204       3         Art 205       3         SoSc 120 or 222       2-3         Social Science General Education Elective       3         Electives       3         31-33
Third Year  Phys 125 5 Art 301 and 302 6 Art 303 or 304 3 Educ 310 3 Educ 330 5 Electives 10-12	Fourth Year  Art 3 Professional Education Block 15 Electives 14-16
32-34	32-34

#### **ENGLISH**

The Department of English offers courses in Composition and Literature leading to the Degrees of Bachelor of Arts and Bachelor of Science in Education. Offered in the English Department are several courses in Journalism and a course in Children's Literature, designed especially for Elementary Education majors.

Students interested in journalism as an extra curricular activity work on the staff of The Chart, the college newspaper, which is published biweekly under the supervision of the English Department.

#### COURSES REQUIRED FOR THE MAJOR IN ENGLISH FOR THE BACHELOR OF ARTS DEGREE

Course Number	Course T	itle	Credit Hours
Engl 207 and 208		ure	
Engl 305	Structure of A	merican Eng	3
Engl 310	Medieval Eng.	Literature	3
Engl 320	Seventeenth Ce Literature		
Engl 410		he English Renaissa	nce
Engl 331	The Romantic	Period or	3
Engl 332		Period or	
Engl 307 or 308	American Liter		
Engl 317		1	3
Engl 312 or 313			
Engl 012 of 010		English Elective	
	opper division	211511011 211001110 111	
	Total		27
Supporting courses (1	May include 9 h	ours English)	15
11 3 (	,	0 /	
			42
Suggested order of stu	ıdy:		
First Year  Eng 102 and 103, or Eng Composition Biology 101  Hist 104 American His Foreign Language Hper 101 and 102 P. E Electives	6 5 tory 5 10	Eng 207 and 208 Eng Math 103 Intro to th of Math Phys 125 Fund of Ph PoSc 120 or 222 Sta U.S. Governmen Sp 101 Speech Techr Engl 202 Exposition Psyc 101 General Psy Hper 162 Health Ed P.E. Activities ( Humanities General Electives	glish Literature 6 the Logic
	32-34		31-34
Third Year		Fourth '	Year
Engl 305 Structure of A English Engl 331 The Romantic Engl 320 Seventeenth Ce English Literature Engl 307 or 308 Americ Literature Social Science General E Elective Upper Division English Electives	Period 3 Period 3 entury 3 an 3 ducation 3 Elective 3	Engl 312 or 313 Shal Engl 310 Medieval E Literature Electives	nglish
	33-35		32-34

## COURSE REQUIREMENTS FOR ENGLISH AS A MAJOR AREA FOR THE BACHELOR OF SCIENCE IN EDUCATION DEGREE

OPTION A. English as one of two teaching fields

Course Number	Course Title Credit	Hours
Engl 102 and 103	Composition or	
Engl 104	Composition	6
Engl 207 and 208	English Literature	6
Engl 202	Exposition	3
Engl 305	Structure of American English	3
Engl 307 and 308	American Literature	6
Engl 312 or 313	Shakespeare	3
Engl 331	The Romantic Period or	
Engl 332	The Victorian Period or	
Engl 340	Twentieth Century Literature or	
Engl 420	Eighteenth Century English Literature	3
Engl 319	School Publications	2
Educ 465	Teaching of Reading in Secondary Schools	2
OPTION P. English	on one teaching Cald	34
OPTION B. English	as one teaching field	
All courses list hours in English	ted under Option A plus 6 to 12 additional	
	40-	46
JUNIO	R HIGH CERTIFICATION ONLY	
Course Number	Course Title Credit	Hours
		Hours
Engl 207	Exposition or	
Engl 207 Engl 305	Exposition or Structure of American English	3
Engl 207	Exposition or Structure of American English American Literature	3 6
Engl 207 Engl 305 Engl 307 and 308	Exposition or Structure of American English American Literature Teaching of Reading in Secondary Schools	3 6 2
Engl 207 Engl 305 Engl 307 and 308 Educ 465	Exposition or Structure of American English American Literature Teaching of Reading in Secondary Schools One Elective in Upper Division English	3 6
Engl 207 Engl 305 Engl 307 and 308 Educ 465 Two of the following	Exposition or Structure of American English American Literature Teaching of Reading in Secondary Schools One Elective in Upper Division English	3 6 2
Engl 207 Engl 305 Engl 307 and 308 Educ 465	Exposition or Structure of American English American Literature Teaching of Reading in Secondary Schools One Elective in Upper Division English	3 6 2
Engl 207 Engl 305 Engl 307 and 308 Educ 465 Two of the following Engl 104 and 105	Exposition or Structure of American English American Literature Teaching of Reading in Secondary Schools One Elective in Upper Division English  Masterpieces of World Literature English Literature	3 6 2 3
Engl 207 Engl 305 Engl 307 and 308 Educ 465 Two of the following Engl 104 and 105	Exposition or Structure of American English American Literature Teaching of Reading in Secondary Schools One Elective in Upper Division English  Masterpieces of World Literature English Literature	3 6 2 3
Engl 207 Engl 305 Engl 307 and 308 Educ 465  Two of the following Engl 104 and 105 Engl 207 and 208  Suggested order of ste	Exposition or Structure of American English American Literature Teaching of Reading in Secondary Schools One Elective in Upper Division English  Masterpieces of World Literature English Literature	3 6 2 3
Engl 207 Engl 305 Engl 307 and 308 Educ 465  Two of the following Engl 104 and 105 Engl 207 and 208  Suggested order of ste	Exposition or Structure of American English American Literature Teaching of Reading in Secondary Schools One Elective in Upper Division English  Masterpieces of World Literature English Literature  udy:  as one of two teaching fields	3 6 2 3
Engl 207 Engl 305 Engl 307 and 308 Educ 465  Two of the following Engl 104 and 105 Engl 207 and 208  Suggested order of str OPTION A: English  First Year Engl 102 and 103 Comp	Exposition or Structure of American English	3 6 2 3 6 2 0
Engl 207 Engl 305 Engl 307 and 308 Educ 465  Two of the following Engl 104 and 105 Engl 207 and 208  Suggested order of str  OPTION A: English  First Year Engl 102 and 103 Comp Biol 101 General Biological	Exposition or Structure of American English	3 6 2 3 6 20
Engl 207 Engl 305 Engl 307 and 308 Educ 465  Two of the following Engl 104 and 105 Engl 207 and 208  Suggested order of str OPTION A: English  First Year Engl 102 and 103 Comp Biol 101 General Biolog Math 103 Intro to the I	Exposition or Structure of American English American Literature Teaching of Reading in Secondary Schools One Elective in Upper Division English  Masterpieces of World Literature English Literature  udy:  as one of two teaching fields  Second Year  position 6 Engl 207 and 208 English Literature  Phys 125 Fundamentals of Physical Science	3 6 2 3 3 6 - 20 erature 6 5
Engl 207 Engl 305 Engl 307 and 308 Educ 465  Two of the following Engl 104 and 105 Engl 207 and 208  Suggested order of str OPTION A: English  First Year Engl 102 and 103 Comp Biol 101 General Biolog Math 103 Intro to the I	Exposition or Structure of American English American Literature Teaching of Reading in Secondary Schools One Elective in Upper Division English  Masterpieces of World Literature English Literature  udy:  as one of two teaching fields  Second Year  position 6 Engl 207 and 208 English Literature  Phys 125 Fundamentals of Physical Science Physical Science Physical Science PoSc 120 or 222 State or U.S.	3 6 2 3 3 6 — 20 erature 6 5
Engl 207 Engl 305 Engl 307 and 308 Educ 465  Two of the following Engl 104 and 105 Engl 207 and 208  Suggested order of str OPTION A: English  First Year Engl 102 and 103 Comp Biol 101 General Biolog Math 103 Intro to the I	Exposition or Structure of American English American Literature Teaching of Reading in Secondary Schools One Elective in Upper Division English  Masterpieces of World Literature English Literature  udy:  Second Year  position 6 Engl 207 and 208 English Literature  Phys 125 Fundamentals of Physical Science Physical Science Scovernment Posc 120 or 222 State or U.S. Government Psyc 101 General Psychology	3 6 2 3 6 20 erature 6 5 2-3 3

Hist 104 History of U.S	Hper 152 Health Education or P.E. Activities Courses 2 Social Science General Education Elective
32-34	32-34
Third Year	Fourth Year
Engl 305 Structure of American English	Engl 312 Shakespeare
32-34	32-34

OPTION B: English as one teaching field. Same as Option A but with 6 to 12 additional hours in English taken as electives.

#### FOREIGN LANGUAGES

The Department of Foreign Languages offer a full curriculum of courses in Spanish, with supporting courses in French and German. The Department offers the degree of Bachelor of Science in Education (in Spanish). A Language Laboratory is used in all Elmentary and Intermediate courses.

### COURSE REQUIREMENTS FOR SPANISH AS A MAJOR AREA FOR THE DEGREE BACHELOR OF SCIENCE IN EDUCATION

OPTION A: Spanish as one of two teaching fields.

Course Numb	per Course Title	Credit Hou
Span 101	Elementary Spanish	5*
Span 102	Intermediate Spanish	
Span 201	Spanish Composition and Conversation	
Span 202	Readings in Spanish Literature	3
Span 303	Advanced Spanish Composition	
Span 306	Survey of Spanish Literature	3
Span 307	Survey of Spanish Literature	
Span 425	Nineteenth Century Spanish Novel	
Span 435	Don Quixote	
•	`	
		31
OPTION B.	Spanish as one teaching field Same as Ontion	A

OPTION B: Spanish as one teaching field. Same as Option A plus 6 to 13 hours in foreign language 37-44

\*A Spanish major who, because of his high-school record, is excused from taking either Spanish 101 or Spanish 102 (or both) or who has taken them for reduced credit, may take a reduced total of credit hours in Spanish. But he must accumulate a total of 24 hours of college credit in Spanish to achieve certification.

Suggested order of study:

OPTION A: Spanish as one of two teaching fields.

First Year	Second Year
Engl 102 and 103 Composition 6 Span 101 Elementary Spanish 5 Span 102 Inter. Spanish 5 Engl 106 or 107 Masterpieces of World Literature 3 Math 103 Introduction to the Logic of Math 3 Sp 101 Speech Techniques 3 Biol 101 General Biology 5 Hper 101 and 102 Phy Education 2	Span 201 Span. Com. and Conversation 3 Engl 207 or 208 English Literature 3 Art 102 Introduction to Art or Mus 150 Music Appreciation 3 Phys 125 Fund. of Phy. Sci. 5 Span 202 Readings in Sp. Literature 3 Hist 104 History of U.S. 5 Pysc 101 General Psychology 3 SoSc General Ed. El. 3 PoSc 120 or 222 State or U.S. Government 2-3 Hper 162 Health Ed or Phy Act Course 2
32	32-33
Third Year  Span 303 Ad Span Comp	Fourth Year  Span 425 Nineteenth Century Span Novel
32-34	30-31

#### SPEECH AND DRAMA

The Department of Speech and Drama offers a full curriculum of speech and drama courses leading to the Degree of Bachelor of Arts and Bachelor of Science in Education.

The Drama Department is housed in the Theatre Barn, uniquely designed to suit its needs. Three or four major productions are presented each school year, in which any students of the college may participate. A summer theatre program runs concurrent with the Summer Session. (See course description of Theatre 201.)

#### COURSE REQUIREMENTS FOR SPEECH AND DRAMA (PERFORMANCE) AS A MAJOR AREA FOR THE DEGREE BACHELOR OF ARTS

Course Number	Course Title Cree	lit Hours
Sp 104	Voice and Articulation	
Sp 215	Oral Interpretation	. 3

Laboratory       2-4         duction       3         nent of the Drama       6         eare       6         g Acting       3         S Theatre       3         Acting and Interpretation       3
duction       3         nent of the Drama       6         eare       6         g Acting       3         's Theatre       3         Acting and Interpretation       3
ment of the Drama
g Acting       3         s Theatre       3         Acting and Interpretation       3
g Acting
Acting and Interpretation 3
32-34
ours in speech and drama) 15
47-49
R THE BACHELOR OF ARTS MA (TECHNICAL DRAMA) JOR AREA
Title Credit Hou
d Articulation 3
erpretation 3
Laboratory2-4
duction3
ment of the Drama
eare
ary Stage Design 3
ed Stage Design 3
ours in Speech and Drama) 15
47749
Second Year
Sp 101 Speech Techniques
or Sp 201 Public Speaking
I Constant

32

32-34

Third Year	Fourth Year
Dr 352 Play Production	Engl 312 and 313 Shakespeare 6 Dr 441 Elementary Stage Design 3
Drama and Soc. Sci. Elective 6	(Technical Dr. Major)
Dr 362 Stage Costume and Design 3 (Tech Dr. Major)	Dr 431 Children's Theatre
Dr 342 Beginning Acting	Dr 421 Styles in Acting and Interpretation (Perf Major) 3
Electives	Electives 20-22
20.04	
32-34	32-34

# COURSE REQUIREMENTS FOR SPEECH AND DRAMA AS A MAJOR AREA FOR THE DEGREE BACHELOR OF SCIENCE IN EDUCATION

OPTION A: Speech and Drama as one of two teaching fields.

Course Number	Course Title Cree	lit Hours
Sp 101 Sp 201 Engl 202	Speech Techniques or	. 3
Engl 305 Sp 105	Structure of American English Voice and Articulation	. 3
Sp 215 Dr 142, 152, 242, 252 Dr 352	Oral Interpretation Theatre Laboratory Play Production	. 4
Dr 372 Dr 332 and 333	Directing for the Stage Development of the Drama	. 3
	One upper division Speech or Drama Elective	. 3
		3.1

OPTION B: Speech and Drama as one teaching field
Same as under Option A plus 6-12 additional hours in Speech and
Drama.

#### JUNIOR HIGH CERTIFICATION ONLY:

Course Number	Course Title	Credit Hours
Sp 101	Speech Techniques or	3
Sp 201 Sp 215	Public Speaking	2
Engl 202	Oral Interpretation Exposition or	3
Engl 305	Structure of American English	
Sp 105	Voice and Articulation	
Dr 142, 153, 242, 252 Dr 353	Theatre Laboratory	2-4
Dr 332 or 333	Play Production	
	Development of the Drama	

20-22

Suggested order of study:

OPTION A: Speech and Drama as one of two teaching fields.

First Year	Second Year
Engl 102 and 103 Composition 2 Sp 105 Voice and Articulation 3 Dr 142 and 143 Theatre Lab 2 Sp 101 Sp Techniques or Sp 201 Public Speaking 3 Hist 104 History of U.S 5 Engl 106 Masterpieces of Lit 3 Biol 101 General Biology 5 Math 103 Introduction to the Logic of Mathematics 3 Hper 101 and 102 Phy Ed 2	Engl 207 English Literature       3         Phys 125 Fund. of Phys. Sci       5         Psyc 101 General Psychology       3         PoSc 120 or 222 State or       U.S. Government       2-3         Engl 202 Exposition       3         Sp 215 Oral Interpretation       3         Art 102 Introduction to Art or       Music Appreciation       3         Dr 242 and 252 Theatre Lab       2         Social Science Gen. Ed. Elective       3         Hper 152 Phys. Ed. Act. Course       2         Electives       2-3
32	32-33
Third Year  Educ 310 Educational Psych	Fourth Year Upper Division Speech & Drama Elective
32-34	32-33

OPTION B: Speech and Drama as one teaching field: same as Option A but with 6 to 12 additional hours in Speech and Drama.

#### MUSIC

The Department of Music offers courses leading to the Degrees of Bachelor of Arts and Bachelor of Science in Education (in either Vocal or Instrumental Music). The performing ensembles of the music department include the College Chorale, the College Community Symphony Orchestra, the Concert Band, the Lab Band, the Vocal Ensemble, and the College-Community Choral Society. In addition to frequent performances by these groups, student recitals are held regularly.

The Department is housed in the Music Building, a part of the Fine Arts Complex, containing classrooms, rehearsal rooms, studios, and prac-

tice rooms.

### COURSE REQUIREMENTS FOR A MUSIC MAJOR FOR THE BACHELOR OF ARTS DEGREE

Cour	se Nu	ımbei	r		C	Course Title Credi	it Hours
Mus	121,	122,	221	and	222	Music Theory	12
Mus	323					Form and Analysis	3
Mus	322					Orchestration	2

Mus 350 and 351	History of Music	4
Supporting courses (May included Music Ensemble)	ude 9 hours music, but excluding	37 15
		52

The student must take a Piano Proficiency Examination during the second semester of his sophomore year. Should he fail the examination, he must take piano for no credit and repeat the examination until he has passed it.

The student shall present a recital during his senior year.

#### Suggested order of study:

First Year	Second Year
Engl 102 and 103 Composition 6 Sp 101 Speech Techniques 3 Mus 121 and 122 Music Theory 6 Music Ensemble 5 Biol 101 General Biology 5 Phys 125 Fund. of Phy. Sc. 5 Hper 101 and 102 Phy. Ed. 2 Applied Music, Major 2 Engl 106 or 107 Masterpieces of World Literature 3	Mus 221 and 222 Music Theory 6 Math 103 Intro to the Logic of Mathematics 3 Hist 104 History of U.S. 5 Music Ensemble 2 PoSc 120 or 222 State or U.S. Government 2-3 Humanities Gen. Ed. Elective 3 Hper 162 Health Ed or Phy Ed. Act. Cour. 2 Music Ensemble 2 Applied Music, Major 2 Electives 3-5
34	31-34
Third Year	Fourth Year
Mus 323 Form and Analysis 3 Mus 350 and 351 History of Music (Counts as General Education Humanities)	Mus 322 Orchestration       2         Applied Music, Major       4         Recital       0         Electives       26-28
32-34	22.24

#### COURSE REQUIREMENTS FOR MUSIC (INSTRUMENTAL) AS A MAJOR AREA FOR THE DEGREE BACHELOR OF SCIENCE IN EDUCATION

OPTION B: Music (Instrumental as one teaching field.

Course Number	Course Title Cr	edit Hours
Mus 121, 122, 221, and 22 Mus 323 Mus 350 and 351 Mus 130 and 131 Mus 132 and 133 Mus 134 and 135 Mus 136 Mus 137 Mus 138 Mus 139	Orchestration History of Music Brass Techniques Strings Techniques Woodwind Techniques Choral Conducting Technique Instrumental Conducting Technique Percussion Techniques Marching Band Techniques Applied Music Major, junior Applied Music Major, senior Applied Music, Piano Applied Music, Minor Large Instrumental Ensemble	2 2 2 2 2 2 2 1 1 1 1 1 1 4 div. 4 4 div. 6 2 2
		.0

The student must take a Piano Proficiency Examination during the second semester of his sophomore year. Should he fail the examination, he must take piano for no credit and repeat the examination until he has passed it.

The student must perform in a large ensemble during every semes-

ter of his residency.

The student must meet department requirements for recital attendance and recital appearance, including a senior recital or joint-recital.

Students wishing to be certified to teach in both Secondary and Elementary Schools may do so by adding the following courses:

Mus 260 Music for the Elementary School Educ 201 Child Psychology

Suggested order of study:

First Year		Second Year	
Engl 102 and 103 Composition	6	Mus 221 and 222 Music Theory	6
Mus 121 and 122 Music Theory	6	Math 103 Intro to the Logic	_
Psyc 101 General Psychology	3	of Math	3
Art 102 Introduction to Art	3	Mus 130 and 131 Brass Techniques	2
Hist 104 History of U.S	5	Mus 136 Choral Conducting	
Engl 106 or 107 Masterpieces		Techniques	1
of World Literature	3	Mus 137 Instrumental Conducting	
Mus 132 and 133 String Techniques	2	1 CCITITIO GCO	1
Music Ensemble	2	Sp 101 Speech Techniques	3

Applied Music, Major	Hper 162 Health Education or Physical Education Activities Course 2 Biol 101 General Biology 5 Applied Music, Major 2 Applied Music, Minor 2 Music Ensemble 2 PoSc 120 or 222 State or United States Government 2-3 Electives 2
34	32-33
Third Year  Mus 350 and 351 History of Music (Counts as General Education Humanities) 6  Mus 322 Orchestration 2  Educ 310 Educational Psychology 3  Phys 125 Fundamentals of Physical Science 5  Social Science General Education Elective 3  Applied Music, Major 2  Applied Music, Minor 2  Educ 330 Teaching in the Secondary Schools  Electives 4-6	Fourth Year  Applied Music, Major
32-34	30-31

# COURSE REQUIREMENTS FOR MUSIC (VOCAL) AS A MAJOR AREA FOR THE DEGREE BACHELOR OF SCIENCE IN EDUCATION

OPTION B: Music (vocal) as one teaching field.

Course Number	Course Title	Credit Hours
Mus 121, 122, 221, 222 Mus 322 Mus 350 and 351 Mus 136 Mus 137	Music Theory Form and Analysis History of Music Choral Conducting Techniqu Instrumental Conducting Te Applied Music, Voice, junior Applied Music, Voice, senior Applied Music, Piano Applied Music, Minor Large Vocal Ensemble	12 3
		43

The student must take a Piano Proficiency Examination during the second semester of his sophomore year. Should he fail the examination, he must take piano for no credit and repeat the examination until he has passed it.

The student must perform in a large vocal ensemble during every semester of his residency.

The student must meet departmental requirements for recital attendance and recital appearance, including a senior recital or joint-recital.

Students wishing to be certified to teach in both Secondary and Elementary Schools may do so by adding to the above the following courses:

Mus 260 Music for the Elementary School Educ 201 Child Psychology

#### Suggested order of study:

First Year		Second Year
Engl 102 and 103 Composition Mus 121 and 122 Music Theory Psyc 101 General Psychology Art 102 Introduction to Art Hist 104 History of U.S. Engl 106 or 107 Masterpieces of World Literature Music Ensemble Applied Music, Major Applied Music, Piano Hper 101 and 102 Physical Education	66633555322222222	Mus 221 and 222 Music Theory 6 Math 103 Intro to the Logic of Math 3 Phys 125 Fundamentals of Physical Science 5 Sp 101 Speech Techniques 3 Hper 162 Health Education or Physical Education Activities Course 2 Biol 101 General Biology 5 Mus 136 Choral Conducting Techniques 1 Mus 137 Instrumental Conducting Techniques 1 Applied Music, Major 2 Applied Music, Minor 2 PoSc 120 or 222 State or United States Government 2-3 Music Ensemble 2 34-35
Third Year		Fourth Year
Mus 323 Form and Analysis Mus 350 and 351 History of Music (Counts as General Education Humanities) Social Science General Education Elective Applied Music, Major Applied Music, Minor Educ 330 Teaching in Secondary School Elective	_	Applied Music, Major
33-3	4	30-31

# DIVISION OF SCIENCE AND MATHEMATICS

Chairman - Dr. James J. Altendorf

Biology: David Bingman, Wayne Habermehl, Orty Orr

Chemistry: James Altendorf, Charles Gosch, Harrison Kash, Eula Ratekin

Drafting: V. L. Anderson

Geology: Staff

Mathematics: Paul Jensen, Pamela Kendrick, Larry Martin,

Martha McCormick

Physics: Charles Gosch, Arthur Strobel, Glenn Smith

The Division of Science and Mathematics supports the objectives and purposes of the College by: (1) offering courses in General Education, Semi-Professional and Technical, and Professional areas; (2) providing experiences whereby a student can better interpret the universe in which he lives; and (3) preparing students to teach in the schools of Missouri.

The Division consists of the departments of biology, chemistry, drafting, geology, mathematics, and physics.

The Division offers programs of study leading to the following degrees: (1) Bachelor of Science in biology, chemistry, and mathematics; (2) Bachelor of Science in Education with majors in biology, chemistry, mathematics, and physics.

#### BACHELOR OF SCIENCE WITH A MAJOR IN BIOLOGY

A major in biology in the Bachelor of Science curriculum includes 37 to 39 hour of biology. This consists of a biology core and either a botany or zoology emphasis. In addition, the major requires 10 hours of chemistry, to include both organic and inorganic chemistry, and 5 hours of algebra and trigonometry or its equivalent. The student is strongly urged to take 8 hours of physics as an elective.

Biology Core:	
General Zoology 120	5
General Botany 110	5
Microbiology 210	5
Genetics 200	3
	_

for Lunde Zoology Electives: At least two of the Zoology Emphasis: Comparative Chordate Anatomy 320 5 following: 
 General Ecology 409
 4

 Embryology 427
 5

 Vertebrate Zoology 425
 5
 Animal Physiology 420 ..... 5 Seminar 430 ..... Invertebrate Zoology 321 ..... 11 Taxonomy of Flowering Plants 310 4 Botany Emphasis: Botany Electives: At least two of the Taxonomy of Flowering Plants 310 following: Human Anatomy & Physiology 220 Plant Anatomy 410 ..... Plant Morphology 411
Plant Physiology 311
General Ecology 409 Seminar 430 ..... 1 5 10 Suggested order of study: (Emphasis in botany) First Year Second Year Biol 110 General Botany ..... Biol 200 Genetics ..... Biol 120 General Zoology ..... Biol 210 Microbiology ..... Chem 115 General Chemistry I .... Chem 153 General Chemistry II .... Math 115 College Algebra and PoSc 120 U.S. Government ..... Psyc 101 General Psychology ...... Trigonometry ..... Engl 102 and 103 Composition .... Art 102 Introduction to Art Soci 140 General Sociology ..... 3 Engl 207 English Literature ...... HPER 101 and 102 Intro to Physical Education electives ...... General electives Physical Activities ..... 34 33 Third Year Fourth Year Biol 220 Human Anatomy and Biol 409 General Ecology ..... Physiology ..... Biol 410 Plant Anatomy ..... Biol 310 Taxonomy of Flow. Plants Biol 430 Seminar ..... Biol 411 Plant Morphology ...... Phys 155 Elem. College Physics I Electives Phys 163 Elem. College Physics II Chem 315 Organic Chemistry ..... Engl 308 American Literature ..... Electives 30 33 \*Suggested senior division electives: Senior division biology with lab ...... 5 Soci 320 Sociology of Religion ..... Hist 313 Mediterranean World ..... Biol 300 History of Biology ..... Biol 431 Problems in Biology ...... 1-3

#### Suggested order of study: (Emphasis in zoology)

First Year  Biol 110 General Botany 5 Biol 120 General Zoology 5 Chem 115 General Chemistry I 5 Chem 153 General Chemistry II 3 Math 115 College Algebra and 7 Trigonometry 5 Engl 102 and 103 Composition 6 Soci 140 General Sociology 3 HPER 101 and 102 Introduction to Physical Activities 2	Second Year  Biol 200 Genetics
34	33
Third Year	Fourth Year
Biol 320 Comparative Anatomy 5 Biol 425 Vertebrate Zoology 5 Phys 155 Elem. College Physics I 5 Phys 163 Elem. College Physics II 3 Chem 315 Organic Chemistry 5 Engl 308 American Literature 3 Electives	Biol 420 Animal Physiology 5 Biol 427 Embryology 5 Biol 430 Seminar 1 *Senior division electives 11 Electives 8
32	30

#### \*Suggested senior division electives:

Senior division literature	3-6
Senior division biology with lab	
Hist 313 Mediterranean World	
Biol 300 History of Biology	2
Biol 431 Problems in Biology	
Art 301 Art History	

## BACHELOR OF SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN BIOLOGY (OPTION A)

A major in biology in the Bachelor of Science in Education curriculum, second teaching field, includes 22 semester hours of biology and other hours as specified below:

Biol 110 General Botany	5
Biol 120 General Zoology	
Chem 115 General Chemistry I	5
College Mathematics elective	3
Senior division electives in Biology	12
Electives in Science	

35

## BACHELOR OF SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN BIOLOGY (OPTION B)

A major in biology in the Bachelor of Science in Education curriculum, single teaching field, includes 30 semester hours of biology and other hours as specified below:

Biol 110 General Botany	5	
Did 110 General Dotally	)	
Biol 120 General Zoology	5	
Biol 220 Human Anatomy and Physiology	5	
Math 115 College Algebra & Trigonomety	5	
Chemistry electives to include one course		
in organic chemistry	10	
Senior division electives in Biology	12	
Electives in Biology	3	
	_	
	45	

NOTE: Biol 101 General Biology is a general education course and does not count toward any baccalaureate degree in biology.

#### Suggested order of study: (Option B)

First Year	Second Year
Biol 110 General Botany 5 Biol 120 General Zoology 5 Hist 104 U.S. History 5 Engl 102 and 103 Composition 6 Math 115 College Algebra and Trigonometry 5 HPER 101 and 102 Introduction to Physical Actiities 2 Electives 4-6	Engl 207 and 208 English Literature 6 Sp 101 Speech Techniques
Third Year  Biol 220 Human Anatomy and Physiology 5 PoSc 120 U.S. Government 3 Psyc 310 Educational Psychology 3 Art 102 Introduction to Art 3 Educ 330 Teaching Secondary School (Biol 330) 5 **Senior division electives in Biol 6 ***Electives 6-8	Fourth Year Chem 315 Organic Chemistry 5 **Senior Division electives in Biol 6 ***Electives
31-33	32-34

\*Suggested electives in biology

Biol	200	Genetics	3
Biol	210	Microbiology	5

	**Suggested senior division electives in bio.	logy
	Biol 310 Taxonomy	4
	Biol 425 Vertebrate Zoology	5
***At least 5	hours of general electives must be senior d	livision.
	Suggested senior divison general elective	s:
	Senior division Literature	3-6
	Soci 320 Sociology of Religion	3
	Hist 313 Mediterranean World	3

### BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN CHEMISTRY

A major in Chemistry in the Bachelor of Science curriculum includes 34 semester hours of Chemistry and other hours as specified below:

Course Num	ber Course Title	Credit Hours
Chem 115	General Chemistry I	5
Chem 153	General Chemistry II	3
Chem 163	Qualitative Analysis	3
Chem 205	Quantitative Analysis	
Chem 315	Organic Chemistry I	5
Chem 355	Organic Chemistry II	
Chem 405	Physical Chemistry I	
	Senior division electives in chemistry	
Phys 255	General Physics I	
Phys 265	General Physics II	
Math 145	Calculus with Analytic Geometry I	
Math 255	Calculus with Analytic Geometry II	

BACHELOR OF SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN CHEMISTRY (OPTION A)

A major in Chemistry in the Bachelor of Science in Education curriculum, second teaching field, includes 28 semester hours of Chemistry and other hours as specified below:

Course Numb	per Course Title	Credit Hours
Chem 115	General Chemistry I	5
Chem 153	General Chemistry II	
Chem 163	Qualitative Analysis	3
Chem 205	Quantitative Analysis	5
Chem 315	Organic Chemistry I	5

Senior division	electives and T	s in chemistry
Suggested order of study:	was	33
First Year  Chem 115 General Chmistry I Chem 153 General Chemistry II Chem 163 Qualitative Analysis Engl 102 and 103 Composition Math 115 College Algebra & Trig Math 145 Calculus w/Anal Geom I HPER 101 and 102 Intro. to Physical Activities Biol 101 General Biology	5 3 3 6 5	Second Year  Chem 205 Quantitative Analysis 5 Math 255 Calculus w/Anal Geom II 5 Math 265 Calculus w/Anal Geometry III
Third Year  Chem 315 Organic Chemistry I Chem 355 Organic Chemistry II Phys 255 General Physics I Senior division History of Geo PoSc 324 Comparative Government English or World Literature Electives		Fourth Year  Chem 405 Physical Chemistry I 5 Chem 453 Physical Chemistry II 3 Chem 462 Physical Chem. II Lab. 2 Phys 323 Atomic & Nuclear Physics 3 Senior Division Literature 5 Senior Division Electives 5 Electives 6-8
30	-32	30-32

### BACHELOR OF SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN CHEMISTRY (OPTION B)

A major in Chemistry in the Bachelor of Science in Education curriculum, single teaching field, includes 26 semester hours of Chemistry and other hours as specified below:

Course Numb	er Co	urse T	itle C	redit Hours
Chem 115	General Chemistr	y I		5
Chem 153				
Chem 163				
Chem 205	Quantitative Ana	alysis .		5
Chem 315				
Chem 355	Organic Chemistr	rv II (	or	
Chem 405	Physical Chemistr	ry I) .		5
			s in chemistry	
Math 115	College Algebra a	and Tr	rig	5
Math 145			Geom I	
Math 255	Calculus with Ar	nalytic	Geom II	5
Phys 255	General Physics	Ι	***************************************	5
				50
Suggested orde	er of study:			
Fi	rst Year		Second Year	
Chem 153 Gener Chem 163 Qual Math 115 Colleg Math 145 Calcu Geometry Engl 102 and 10 HPER 101 Intr Physical Ac	O3 Composition oduction to	5 3 3 5 5 6	Chem 205 Quantitative A Math 255 Calculus w/An Geometry II Math 263 Calculus w/An Geometry III Sp 101 Speech Technique Hist 104 History of the U Psyc 101 General Psychol Biol 101 General Biolog	nalytic
Electives	····· 2·	-4	HPER 162 Health Educ	cation 2
	31-3	3		33
Th	ird Year		Fourth Year	
Phys 255 General Phys 265 General PoSc 324 Comp Senior Division Educ 330 Teach School	al Physics I	5 5 5 3 6 5 3	Chem 355 Organic Chem or Chem 405 Physical Chem Art 301 Art History Senior division elective H Geography Education Professional Semester (2) Electives	istry I (istory or
	3	2		32-33

### BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN MATHEMATICS

A major in Mathematics in the Bachelor of Science curriculum includes 36 semester hours of Mathematics and other hours as specified below:

Course Number Co	ourse Title	Credit Hours
Math 255 Math 265 Math 303 Calculus with A Calculus with A Fundamentals of *Senior division 6	nalytic Geometry I	5 5 3
		54
Suggested order of study:		
First Year	Second	Year
Math 145, 255 Calculus w/Analytic Geometry I, II	10 Geometry III 6 Phys 265 General Pl Math 323 Differentic 8 Phys 273 Statics 1 Phys 255 General Ph L-3 Hist 104 History of	5 hysics II
34-	35	32
Third Year  Math 303 Fundamentals of Mathematical Thought  Math 353 Linear Algebra  Math 343 Abstract Algebra  Phys 333 Analytical Mechanics  Hist 313 Mediterranean World  Math Elective (300 or above)  Senior Division Literature	Fourth  Math 423, 433 Adva Calculus I, II HPER 162 Health E Math 363 Probability Statistics Art 301 Art History Senior Division Elect Electives	onced 6 ducation 2 y and 3 y

### BACHELOR OF SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN MATHEMATICS (OPTION A)

A major in Mathematics in the Bachelor of Science in Education curriculum, second teaching field, includes 27 semester hours of Mathematics and other hours as specified below:

Course Numb	ber	Course Title	Credit	Hours
Math 145 Math 255		Analytic Gometry Analytic Geometry		5 5

Math 265 Calculus with	Analytic	Geometry III	5
		ematical Thought	
		es in Mathematics	
			27
BACHELOR OF SCI MAJOR IN MA		N EDUCATION V ATICS (OPTION	
*A major in Mathematics riculum, single teaching field, and other hours as specified b	includes	achelor of Science in s 30 semester hours	Education cur- of Mathematics
	Course T		Credit Hours
Math 265 Math 303 Math 303  Calculus with Calculus with Fundamentals **Senior division	Analytic Analytic of Math elective	Geometry I	5 
*Course must be approve **One course each in all tics are strongly recommended Suggested order of study:	gebra, ge	cometry, and probab	vility and statis-
*Math 115 Algebra & Trigonome Math 145 Calculus with Analytic Geometry I  Engl 102 and 103 Composition Chem 115 General Chemistry I  Chem 153 General Chemistry II  Hist 104 History of the U.S.  PoSc 120 or 222  HPER 101 and 102 Introduction t  Physical Activity	5 5 5 5	Math 255 Calculus Analytic Geometry Math 265 Calculus Analytic Geometry Math 265 Calculus Analytic Geometr Phys 255 General P Phys 265 General P Psyc 101 General P HPER 162 Health E Sp 101 or 201 Soci 140 General So	with  y
3	33-34		31
Third Year  Math 303 Fundamentals of Mathematical Thought  Math 333 Geometry  Math 343 Abstract Algebra  Psyc 310 Educational Psychology  Math 330 Teaching in the Second	3 3	Fourth  Education Professiona Math 363 Probability Senior Division Electi Mathematics Senior Division Elect Electives	Semester 15 Statistics 3 ves in

Two	of the	follo	wing:		
Engl Elect			207,		6
					31

32

\*Four units of High School Mathematics and a satisfactory score on Math Placement Test will allow a student to by pass Math 115.

### BACHELOR OF SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN PHYSICS (OPTION A)

A major in Physics in the Bachelor of Science in Education curriculum, second teaching field, includes 28 semester hours of Physics and other hours as specified below:

Course Number	er Course Title C	redit Hours
Phys 255 Phys 265 Phys 323 Math 145 Math 255 Math 265	General Physics I General Physics II Atomic and Nuclear Physics Calculus with Analytic Geometry I Calculus with Analytic Geometry II Calculus with Analytic Geometry III Senior division electives in Physics Physics laboratory 373 or 383 Electives in Science	5 5 3 5 5 5
		40

### BACHELOR OF SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN PHYSICS (OPTION B)

A major in Physics in the Bachelor of Science in Education curriculum, single teaching field, includes 28 semester hours of Physics and other hours as specified below:

Course Number	er Course Title	Credit Hours
Phys 255	General Physics I	5
Phys 265	General Physics II	5
Phys 323	Atomic and Nuclear Physics	3
Phys 333	Analytical Mechanics	
Phys 353	Electricity and Magnetism	3
Phys 373	Intermediate Physics Laboratory	
Phys 383	Modern Physics Laboratory	
Math 145	Calculus with Analytic Geometry I	
Math 255	Calculus with Analytic Geometry II	
Math 365	Calculus with Analytic Geometry III	
Math 323	Differential Equations	3

		46	
NOTE: The following courses may be used for the to	s do no otal col	t count toward a physics major lege hours nescesary for graduati	but on.
Course Number C	ourse 7	Title Credit Ho	urs
Phys 155 Phys 163 Phys 273 Phys 283 Elementary Col Elementary Col Statics Fundamentals o	lege Pl lege Pl	cal Science       5         nysics I       5         nysics II       3	
Suggested order of study:			
First Year  Math 115 Algebra & Trigonometry Math 145 Calculus with Analytic Geometry I	5 6 5 3 5	Second Year  Math 255 Calculus with Analytic Geometry II  Math 265 Calculus with Analytic Geometry III  Phys 255 General Physics I  Phys 265 General Physics II  Psyc 101 General Psychology  Sp 101 or 201  Econ 202 Principles of Economics Biol 101 General Biology	5 5 5 3 3
3 3	-34		34
Third Year  Phys 323 Atomic & Nuclear Physic Phys 333 Analytical Mechanics  Phys 343 Heat & Thermodynamics Phys 373 Intermediate Physics Lab Math 323 Differential Equations  HPER 162 Health Education  Psyc 310 Educational Psychology Educ 330 Teaching in the Secondary Schools  Electives	3	Fourth Year  Education Professional Semester (2) Phys 353 Electricity & Magnetism Phys 363 Physical Optics Phys 383 Modern Physics Lab. Electives	3 3
	33		30

#### DIVISION OF SOCIAL SCIENCE

Chairman: Mr. Harry Gockel

History: Tommy Holman, Julie Hughes, C. H. Rogers, Harry C. Gockel.

Political Science: Annette St. Clair, Gale Renner.

Sociology: Forrest Kellogg, John Eli.

The Division of Social Sciences has as its purpose to provide the student with the skill, attitudes, and understanding necessary to give his life direction and meaning; to encourage the student to think and evaluate the broader issues that he will encounter in life; and to acquire new interests that he may pursue for the sheer pleasure of learning.

The division has as its special concern the preparation of social science teachers for the schools of Missouri and the undergraduate education of students who are planning careers in government and community service.

#### The objectives of the division are:

- 1. To prepare students for certification as social science teachers in the elementary and secondary schools.
- 2. To provide the undergraduate education needed for students desiring to continue graduate work in history or political sciences.
- 3. To provide a program of the extra-curricular activities that will aid in the introduction of the student to his future role in serving his community and nation.

#### BACHELOR OF ARTS DEGREE

This degree is intended for students who plan to continue their education beyond the bachelor's level and/or who plan to enter government or community service. A student may select a major in history or political science.

#### COURSE REQUIREMENTS FOR A MAJOR IN HISTORY

Course Num	nber Course Title	Credit Hours
Hist 200	Western Civilization	5
Hist 104	History of the United States	5
Hist 203	Modern European History	3
Hist 314	Ancient History	3
Hist 420	Far Eastern History	5
PoSc 324	Comparative Government	3
PoSc 320	American Presidency	
Phil 280	Introduction to Philosophy	3
Geog 220	Regions and Nations	
_	Upper division electives in U.S. History	6

#### Suggested order of study:

First Year		Second Year
English 102  Math 103 or 113  Psyc 101 General Psychology  HPER 101 Introduction to P.E.  Hist 104 History of U.S.  Biol 100 General Biology	3	History 200 Western Civilization 5 Phys 125 Fundamentals of Physical Science 5 Sp 101 or 201 3 HPER 162 Health Education 2 Phil 280 Introduction to
HPER 102 Intro to P.E. Eng 103 Comp. Foreign Language Electives	5	Philosophy         3           Geog 220 Regions & Nations         3           Art 105 Art Appreciation         3           Foreign Language         5           Electives         3.5
	32	32-34
Third Year		Fourth Year
Hist 203-204 Mod. European Hist. 1815 to Present Hist 300 Soc. & Intell. Hist. to 1877 Hist 314 Ancient World Eng 207-208 English Lit Hist 301 Soc. & Intell Hist. Hist 313 Medt. World Upper Division Electives (Supporting Area) Electives	3 3 3 3	PoSc 324 Comparative Government 3 Hist 319 Econ Hist of U.S 3 PoSc 320 Am Presidency 3 Hist 420 Far East History 5 Elective (Supporting Area 3.6 Upper Division Electives 6 Electives 6.9
	33	32

## COURSE REQUIREMENTS FOR A MAJOR IN POLITICAL SCIENCE

Course Nu	mber Course Title Cred	it Hours
Hist 200	Western Civilization	. 5
PoSc 222	State and Local Government	. 2
PoSc 120	U.S. Government	. 3
PoSc 224	Current World Affairs	. 3
PoSc 318	Political Parties	
PoSc 332	Municipal Government	
PoSc 324	Comparative Government	
PoSc 320	American Presidency	
PoSc 428	Public Administration	
Phil 280	Introduction to Philosophy	
Geog 220	Regions and Nations	
Soci 140	General Sociology	
Econ 202	Principles of Economics	
	Upper Division electives in U.S. History	
	Electives in other Social Sciences	

#### Suggested order of study:

First Year		Second Year
PoSc 120 U.S. Government	3	Geog 220 Regions & Nations 3
Sp 101 or 201	3	HPER 162 Health Education 2
Eng 102 Composition	3	Hist 200 Western Civilization 5
Math 103 or 113	3	Phys 125 Fund. of Phys. Sci 5
HPER Intro to P.E.	1	Psyc 101 General Psychology 3
PoSc 222 State Government	2	Soci 140 General Sociology 3
Eng 103 Composition	3	Phil 280 Intro to Phil 3
Hist 104 U.S. History	5	Eng 106 or 107 or 207 or 208 6
Biol 101 General Biology	5	PoSc 128 United Nations 1
HPER 102 Intro to P.E.	1	Electives 0-3
Electives	3-5	
32	-34	31-34
Third Year		Fourth Year
PoSc 332 Municipal Government	3	PoSc 324 Comparative Govt 3
PoSc 224 Cur. World Affairs	3	Hist 306 Soc. Intell to 1877 3
Econ 201 General Economics	3	Hist 301 Soc. Intell. 1877 to
Econ 202 Prin. of Economics		
Econ 202 Fin. of Economics	2	nresent 3
D.C. 210 Delitical Darties		present 3
PoSc 318 Political Parties	3	PoSc 428 Public Administration 3
PoSc 320 Am. Presidency	3	PoSc 428 Public Administration 3 Upper Division Electives 11-12
PoSc 320 Am. Presidency	3 3 8-9	PoSc 428 Public Administration 3
PoSc 320 Am. Presidency	3 3 8-9	PoSc 428 Public Administration 3 Upper Division Electives 11-12
PoSc 320 Am. Presidency	3 3 8-9	PoSc 428 Public Administration 3 Upper Division Electives 11-12

## BACHELOR OF SCIENCE IN EDUCATION DEGREE (SOCIAL SCIENCE)

This degree is intended for students desiring to become teachers at the secondary school level. To obtain certification to teach in Missouri at the secondary level, a student must complete one of the two programs outlined below. One program places emphasis on history, the other on political science. Both programs are designed to fit Option B of the requirements for the Bachelor of Science in Education degree. (No major is offered under Option A in Social Science.)

# COURSE REQUIREMENTS WITH EMPHASIS IN HISTORY (OPTION B)

Course Number	C '	Tid.	
PoSc 120 U. S. Governm PoSc 222 State and Local Hist 200 Western Civiliz Hist 313 Mediterranean Hist 420 Far East History *Econ 201-202 Principles of 1 Geog 220 Regions and Nat Geog 230 Latin America Soci 140 General Sociolog Soci 340 Social Stratifica Hist 300 Social and Intell Hist 330 Teaching Social	Govern gation World Economic tions gy tion ectual H ectual H Science	History of U.S. to 1877 History of U.S. from 197 in Secondary School	2 2 5 5 6 3
Upper division	elective	in Pol Science	3
		3	47
*History 319—Economic either economics course.  Suggested order of study:	Histor	y of U.S., may be sub	stituted for
First Year		C . 1 %	
PoSc 120 U.S. Government Hist 104 History of U.S. Soci 140 General Sociology Engl 102 and 103 Composition Math 103 or 113 Psyc 101 General Psychology Engl 106 or 107 World Literature Art 102 Introduction to Art HPER 101 and 102 Intro to P.E. Electives	5 - 3 - 6 - 3 - 3 - 3	Second Year Sp 101 Speech Tech Biol 101 General Biolog: HPER 162 Health Educa Hist 200 Western Civili Geog 200 Regions and N Phil 220 Introduction to PoSc 222 State Governm Phys 125 Fundamentals Physical Science Electives	3 y
3	2-34		32-33
Third Year		Fourth Year	34,33
Geog 230 Latin America Econ 201-202 Prin. of Econ. Hist 300 Soc Intell Hist U.S. Hist 301 Soc Intell Hist U.S. 1877 Hist 313 Medt. World Psyc 310 Educational Psyc Educ 330 Teaching Sec. School (Hist 33 0 is included) Electives	3 3 3 5	PoSc 340 Social Strat  Hist 420 Far East History Upper Division Elective i Science Electives Educ. Professional Semest	y 5 n Pol 3
32	2-34		31-33

## COURSE REQUIREMENTS WITH EMPHASIS IN POLITICAL SCIENCE—(OPTION B)

Course Nun	nber	Course 7	Title	Credit Hours	
Hist 200	Western Civiliz	ation		5	
PoSc 120	U.S. Government				
PoSc 222	State and Local Government				
Hist 204	Modern European History				
PoSc 318	Political Partie	3 3			
PoSc 424	Constitutional	Law		3	
PoSc 328					
Hist 319	Economic Histo	ry of U	J.S	3	
Hist 330	Teaching Social	Science	in the Secondary Scho	ol 2	
Geog 230	Latin America .			2	
Soci 140	General Sociolos	ν		3	
Soci 340	Social Statificat	ion			
Econ 202			s		
Geog 220	Regions and Na	ations		3	
J			in American History		
	11		and a substitute of y		
				47	
Suggested of	rder of study:				
-	First Year		Second Ye	ar	
PoSc 120 U.S Hist 104 Hist	ory of U.S.	3	PoSc 222 State Govern	ment 2	
Soci 140 Gen	eral Sociology	3	Hist 200 Western Civ. Phil 280 Intro to Phil	ilization 5	
Engl 102 or	103 Composition	6	Geog 220 Regions and	Nations 3	
Psyc 101 Ger	neral Psychology	3	Econ 202 Prin. of Eco Sp 101 Speech Technic	Tiles 3	
Art 103 Intro	duction to Art	3	Biol 101 General Biolo	9V 3	
HPER 10 land 102 Intro to P.E. 2 Engl 106 or 107 World Literature 3 HPER 152 Health Educatio Phys 125 Fund. of Phys. S			cation 2		
Electives		. 1-3		4.5	
	3	2-34		32-33	
	Third Year		Fourth Yea	ır	
Hist 204 Mod	l. European Hist	5	PoSc 328 Political The	ory 3	
Hist 319 Econ	itical Parties	. 3	PoSc 424 Constitutiona Soci 340 Social Strat	1 Law 3	
Geog 230 La	tin America Intel. Hist.	. 3	Electives	6-8	
of United	Intel. Hist. I States	. 3	PROFESSIONAL SEM (Second semester)	ESTER 15	
Educ 330 Tea	ching Sec. Schools	. 1	(become semester)		
Psyc 310 Educ Hist 301 Soc.	cational Psychology	3			
of United	States	. 3			
Senior Division	n Electives	. 4-5			
Total	1 3	2-33	Total	30-32	

#### REQUIREMENTS TO QUALIFY TO TEACH SOCIAL SCIENCE AS A SECOND FIELD AT GRADES 7 THROUGH 9 ONLY

Course Numi	ber Course Title	Credit	Hours
Hist 200	Western Civilization		5
Hist 104	History of the United States		5
PoSc 120	United States Government		3
PoSc 222	State and Local Government		2
Econ 202	Principal of Economics		3
Geog 220	Regions and Nations		3

#### NOTE:

- 1. The professional education sequence is required for the Bachelor of Science in Education degree. The professional education sequence is taught in the Division of Education and Psychology.
- 2. A second teaching field at the Junior High School level may be obtained by earning a minimum of 21 hours in one of the following areas: (1) physical education (2) speech and drama (3) foreign language (4) journalism (5) mathematics (6) science (7) English.

# DIVISION OF SEMI-PROFESSIONAL AND TECHNICAL EDUCATION

#### **AUTOMOTIVE TECHNOLOGY**

Auto 100 Automotive Engine (5) A beginning course in theory and practical mechanics of the Internal Combustion Engine. Emphasis will be placed on the physics and chemistry of combustion as related to engineering principles. Also, students will work in laboratory shops with engines to learn mechanical relationships and usage of tools and guaging instruments. 3 one-hour lectures; 12 hours lab. per week.

Auto 120 Automotive Electrical, Ignition and Carburetion Systems (5) A beginning course in electricity, basic automotive ignition systems, fuels and lubricants, production and testing. Emphasis is on electrical fundamentals as related to spark ignition and carburetion principles. Laboratory periods provide opportunity to learn mechanical relationships of parts in carburetors, starters, generators, regulators and relays, and distributors. 3 one-hour lectures; 12 hours lab. per week.

Auto 200 Automotive Chassis, Brakes and Transmissions (5) Principles of hydraulics, pneumatics, and dynamic forces as related to the modern automobile. Shop work will emphasize balance, steering, control, suspension design, and power train component operation. Students will learn mechanical relationships in transmissions, clutches, and differentials; also, front and rear suspensions and brake systems. 3 one-hour lectures; 12 hours lab. per week.

Auto 220 Automotive Refrigeration and Air Conditioning (3) Course designed to familiarize student with automotive air conditioning installation and thermodynamic principles. Students will service units on and off the vehicle and study problems related to heat transfer and cooling. 2 one hour lectures; 6 hours lab. per week.

Auto 250 Automotive Body and Paint (5) Theory and practice in metallurgy as related to metal fabricating, moulding, shaping, and welding. Students will work in shop laboratory repairing basic automotive body parts. Emphasis is on repair theory as well as making repairs and refinishing damaged body parts. 3 one-hour lectures; 12 hours lab. per week.

Auto 260 Automotive Servicing (5) Simulated automotive dealership garage with actual working conditions on customer's cars. Emphasis will be placed on public relations, auto shop-lay-out, and management of personnel.

Auto 111 Technical Mathematics (3) Review of basic Mathematics, algebra, and the functional concepts of trigonometry. Includes use of tables and graphic methods of solving problems with emphasis on application to problems in applied fields. Daily.

Auto 190 Technical Science (4) Graphical and mathematical analysis of forces, laws of motion machines, and mechanical power, fluid mechanics, and conductivity. Course work places emphasis on applied problems. Three one-hour lectures; 1, two-hour lab.

Auto 101 Business and Shop Records (3) A basic accounting cycle with emphasis on recording transactions affecting cash, sales, purchases, and the preparation of financial statements. Three one-hour lectures.

#### DATA PROCESSING

Comp 177 Basic Computing Machines (3) A study of electric accounting machines; illustrating the need for machines in accounting and record keeping, and the concept, power, and flexibility of the unit record. Includes the unit records, machine functions, elements of a machine, the card punch and verifer, interpreter, sorter, reproducing punch, collator, tabulators, and calculators. Daily.

Comp 172 Key-Punch Operation (3) Preliminary emphasis on basic mastery of the key-board and mechanism of the key-punch. Latter portion of the course places emphasis on speed and accuracy of operation. Daily.

Comp 175 Introduction to Programming (3) A introduction to digital computers which includes: basic principles; systems theory, decimal system, binary system, and octal system; systems conversions; arithmetic operations; self--complementing codes and other coding systems; computer logic; systems components; general block diagram and program functions; high speed memory; programming essentials and solution of simple data processing problems. 2 one-hour lectures; 1 two-hour lab per week. Prerequisite: Basic Computing Machines or consent of Instructor.

Comp 177 Advanced Programming (3) A study of the functions and capabilities of electronic data-processing machines which familiarizes the student with some of the tools and raw material necessary for becoming a programer. Includes computer applications, organization of the data processing system, instruction—card system, methods of program debugging, housekeeping techniques, loops and indexing, and subroutines. 2 one-hour lectures; 1 two-hour lab per week. Prerequisite: Introduction to Programming 175.

Comp 180 Data Processing Applications (3) A continuation of 177. The principles presented in previous courses will be employed repeatedly in this course. Includes subroutine, macro-programming, job timing, programming a random access device, and program testing. 2 one-hour lectures; 1 three hour lab. per week. Prerequisite: Advanced Programming 177 or consent of Instructor.

Comp 181 Computer Machine and Machine Language (3) Provides the necessary foundation for study of business data processing. Usually includes the concepts of notation; binary arithmetic; representation of a number with an arbitrary base, fixed and floating point numbers; precisions and significances; and linear equations. 3 one hour lectures.

Comp 182 Systems Development & Design (3) A course in business systems design and development designed to guide the student through the evolution of a system: analysis of present information flow, system specifications and equipment selections, and implementation of the system. Includes the approach, requirements of a system, developing the solution, data controls, system controls, system evaluation, finalizing the system and system implementation. 3 one hour lectures plus necessary arranged laboratory time.

Engr 280 Strength of Materials (3) A study of unit stress and strain, the modulus of elasticity and the various types of stress. The beam theory and its application to beam design is emphasized, followed by discussion of the column, springs, torsion charts, and riveted and welded pressure tanks. Allowable bending, tension, compression and shearing stresses of structural materials are emphaized. 2 one hour lectures and 1 two hour lab. per week.

Comp 290 Analog Computers (3) Methods and techniques of solving simultaneous linear and non-linear differential equations on electronic analog computers. Includes the principles of multiplication, division and simulation of non-linear devices and systems. 2 one hour lectures; 1 two hour lab. per week.

Comp 453 Introduction to Numerical Analysis (4) Digital computer programming, finite differences, numerical solution of non-linear systems and differential equations. Solution of many problems on a digital computer. Must be preceded or taken simultaneously with Mathematics 323. 3 one hour lectures; 1 two hour lab. per week.

#### NURSING

Nurs. 100 Fundamentals of Nursing (5) A course designed to orient the student to the role of the professional nurse. Includes ethics, history of nursing, personal hygiene, nutrition, medical asepsis, and medications. The approach is to introduce the student to the role of the nurse in meeting needs common to all patients and to the privileges and responsibilities of the professional nurse. The student is given an opportunity to acquire knowledge, skill, and attitudes essential for the practioner of nursing, based on principles of physical, biological and behavioral science. Pre and post conferences with supervised practice. Three hours lecture a week. Eight hours laboratory.

Nurs. 120 Medical and Surgical Nursing I (8) Theory and supervised practice are provided for nursing care of adults, pre, intro, and post-operatively; of patients with long-term and rehabilitative needs, those receiving radiation, and those with neo-plasms as they occur in various anatomic locations. Experience for each student is varied to include both medical and surgical conditions. Includes pharmacology, diet therapy, and emergency nursing. Pre and post conferences with supervised practice. 5 hours class a week. 12 hours Clinical Laboratory Prerequisite: Fundamentals of Nursing.

Nurs. 130 Psychiatric Nursing (4) This course is planned to help the student develop an understanding of the general principles of psychiatric nursing. Supervised practice in the application of these principles is provided with pre and post conference with student. Includes the prevention of illness and rehabilitation with pharmacology and diet therapy integrated. 4 hours class; 16 hours Clinical Laboratory.

Nurs. 140 Growth and Development (3) A study of physical, mental and emotional development from conception, infancy through senesence. Concepts and principles basic to understanding of human development and human relations. Summer Course.

Nurs. 210 Maternal and Child Health (8) This is a family centered course with emphasis on normal aspects of the maternity cycle, prevention of complications, the nurse's role as a health teacher. Emphasis is on individualized care in health and disease. A variety of teaching methods and resources are utilized in the classroom. The supervised practice in the clinical area includes pre and post conferences. Child care centers, clinics and physicians office are expected to be utilized in supplementing clinical facilities. Pharmacology, normal nutrition and diet therapy integrated. Based on principles of physical, biological and behavioral sciences. 5 hours a week; 12 hours laboratory.

Nurs. 201 Nursing Trends (1) A survey of nursing with particular references to contemporary movements in international nursing, legislation, professional organizations, and in nursing literature. 1 hour theory each week.

Nurs. 202 Nursing Trends II (1) A continuation of Nursing Trends I. Includes preparation for licensure, employment, financial programing of graduate life. 1 hour theory each week.

Nurs. 220 Medical and Surgical Nuring II (8) This course is design-to provide information to enable the student to further develop knowledge and skills necessary to provide nursing care to meet the individual needs of pateints. Major health problems are studied with consideration of scope, prevention, diagnosis, treatment, rehabilitation, and nursing care. Consideration is given to deviation from normal growth and development which predisposes of illness, psychological, cultural, and socioeconomic factors which may cause, complicate, or affect the patients treatment. Supervised practice is provided for nursing care of medical and surgical patients which offer the following experience: Infectious diseases, psychosomatic disorders, allergic reactions neuromusculoskeletal impairment and metabolic dysfunction. Includes pharmacology, diet therapy and emergency nursing. 5 hours class theory; 12 hours clinical experience.

# PSYCHOLOGY HEALTH AND PHYSICAL EDUCATION

#### **EDUCATION**

Educ 010 Techniques of Reading (cr. only) f.w. A reading improvement program consisting of a group and individual work, intended primarily for students needing some remedial work in reading. Individual diagnostic reading tests are given to determine student needs.

Educ 313 Guiding the Exceptional Child (2) w. Understanding and guiding the exceptional child through study of child growth and behavior as it relates to such children. How to recognize and deal with specific problems of exceptional children.

Educ 317 Problems of Teaching Arithmetic in Elementary Schools (2) w. Basic course in the teaching of arithmetic in the elementary grades. The application of principles of learning and techniques of presentation are considered. (Math 317)

Educ 318 Science in the Elementary School (2) f. Emphasis on science in the child's environment. Development of problems, activities, and experiments. Survey and evaluation of teaching materials and laboratory equipment suitable to the elementary school. Prerequisite: A course in biological and in physical science.

Educ 320 Basic Methods of Elementary School Instruction (5) f,w. An intergrated course including problems related to the teaching of elementary social studies and general instruction in the elementary school. Classroom organization and mangement; lesson, curriculum, and unit planning are studied. Should be taken concurrently with Psych. 310. Prerequisite: Psych 202, Child Psychology or a comparable course.

Educ 330 Teaching in the Secondary School (5) f,w. A study of techniques of teaching in the secondary school with consideration of the social and psychological nature of the learner. Emphasis on classroom management and control, methods of presentation, construction of units and lesson plans. Development and status of secondary education in United States. Introduces students to professional laboratory experiences. Special methods of teaching the various academic areas will be included in this course as a part of a team teaching arrangement.

Educ 335 Language Arts and Reading in the Elementary School (3) f,w, s. Foundation course for development of understanding and attitudes necessary to teach written and oral communication, listening, and reading at the elementary level.

Educ 375 Introduction to Instructional Media (2) f,w,s. Designed to give the teacher a basic understanding of the preparation and use of the various audio-visual materials and devices, with emphasis on the preparation of such materials. Recommended for elementary and secondary education majors.

Educ. 405 History and Philosophy of Education (3) w. Study of educational thinking and practices from the ancient to the present. Emphasis is on relating earlier educational thought to the schools of today.

Educ 420 Foundations of Curriculum Devedopment (3) w. An overview of curriculum and instruction as it relates to the elementary and secondary schools considers the psychological, sociological, and philosophical basis for curriculum building.

Educ 465 Teaching Reading in Secondary Schools (3) w. Designed to help prospective teachers understand reading development and its part in the total school program.

Educ. 440 Principles of Guidance (3) f.w. Survey of guidance philosophies, principles and practices. Designed for the classroom teacher as well as the guidance specialist, and is a basic course in the guidance sequence.

Educ. 430 Legal and Professional Responsibilities of Eductors (3) w. Legal and professional role of school personnel, their relationship to federal and state governments, and to local school districts; certifications; salary schedules, retirement, and other benefits; professional organizations for teachers; relationship with the administration, pupils, parents, and the community.

Educ. 480 Sudent Teaching, Elementary (6) w. Participation, under supervision, in teaching on the elementary level in an off-campus school. Prerequisites: 88 semester hours with a grade-point average of 2.2; admission to the program of teacher education; educ. 320. Course assignment will include full-time supervised teaching for one-half of a semester. Additional general conferences scheduled as needed. Specific assignment to be made by Head, Department of Elementary Education.

Educ. 481 Student Teaching, Elementary (3) w. Designed to provide student teaching experience in an approved public school in the student's subject or foreign languages at both elementary and secondary levels. Prerequisite: See Educ. 480. Course assignment to consist of a minimum of 15 hours a week of participation and conferences scheduled as needed. Specific assignment to be made by Head, Department of Elementary Education.

Educ. 490 Student Teaching, Secondary (6) w. Participation, under supervision, in teaching on the secondary level in an off-campus school. Curriculum, materials, and methods integrated with teaching participation and observation. Prerequisites: Educ. 330 or equivalent; and fifteen semester hours in teaching field. Grade-point average of 2.2. Assignment to consist of full-time teaching for one-half semester (professional courses to be taken during other one-half semester). Specific assignment to be made by Head, Dept. of Secondary Education.

Educ. 491 Student Teaching, Secondary (6) w. Participation, under supervision, in teaching on the secondary level in an off-campus school. Curriculum, materials, and methods integrated with teaching participation and observation. Prerequisites: See Educ. 490. Assignment to consist of daily three-hour block of time during a regular semester.

Educ. 493 Student Teaching, Secondary (3) w. Participation, under supervision, in teaching on the secondary level is an off-campus school. Curriculum, materials, and methods integrated witr teaching participation and observation. Prerequisites: See Educ. 490. and 481. Assignment to consist of minimum of fifteen hours per week of participation and conferences. Specific assignment to be made by Head, Department of Secondary Education.

Educ. 495 Techniques of Diagnostic and Remedial Instruction in Reading (2) w. A study of devices and techniques for diagnosis of reading disabilities and presentation of suggested remedial measures and methods of reducing deficiencies. Practical applications and laboratory experience will be emphasized. Special emphasis upon intermediate and secondary school reading problems. Prerequisite: Education 335 or 465.

#### **PSYCHOLOGY**

Psych. 101 General Psychology (3) f,w. An introductory course, stressing the importance of the psychological mechanisms underlying all mental processes, such as sensation, perception, emotion, thinking, and learning.

Psyc. 201 Child Psychology and Development (3) f.w. Behavior and growth patterns of children are studied. Psychological facts and principles which are necessary for the understanding of the child in his home and school environment. Prerequisite: Psyc. 101.

Psyc. 202 Adolescent Psychology (3) f,w. Sum. A study of the development of the attitudes, interests, problems, and adjusments of the adolescent. A foundation for the proper evaluation of adolescent behavior. Prerequisite: Psych. 101.

Psyc. 205 Psychology of Personal Adjustment (3) f. A study of the basic problems of personality adjustment intended to aid the student in promoting better mental health for himself and to better understand the behavior of others.

Psyc. 310 Educational Psychology (3) f,w, Sum. Study of the psychological problems involved in education and the practical application of psychological principles of teaching. Special emphasis placed on measurement, the nature of learning, and the environmental influences behavior. Prerequisite: Psych. 101.

Psych. 340 Social Psychology (2) w. Study of the social behavior of the individual, interests and tendencies that grow out of the community life of the race in terms of inter-group and interpersonal relationships. Prerequisite: Psych. 101.

Psych. 410 Measurement and Evaluation in Education (3) w. A study of test construction and appraisal. Practice in evaluating and selecting tests, in administering and scorig, and in the analysis and presentation of test results.

Psych. 430 Abnormal Psychology (3) w. Study of the pathological individual in regard to perception, associating, memory, emotion, motor ability, nature, development, and forms of personality. Prerequisite: Five hours of Psychology.

Psych. 435 Independent Study (3) By arrangement. A research problem of special interest is scheduled and completed by each student, under the immediate direction of the instructor. Open only by permission of the department.

Psych. 450 Psychology of Learning (3) w. Designed to acquaint the student with the major theories of learning. The theories will be analyzed, compared, and evaluated in the light of current research findings in the area of human and animal learning. Prerequisite: 6 hours of Psychology.

Psych. 475 Individual Intelligence Testing (3) f or w. A study of the individual intelligence tests with practice in the administering and interpreting of the scores. Emphasis is placed on the Wechsler Scales. Prerequisite: 9 hours of Psychology.

#### **HEALTH**

HPER 162 Health Education (2) f.w. Study of some health problems of the individual, body mechanics ,nutrition, quackery, science disease, sex hygiene, mental hygiene, and the cause and prevention of common diseases.

Psy 205 Psychology of Personal Adjustment (3) (see Psychology)

Biol 220 Human Anatomy and Physiology (see Biology)

HPER 285 First Aid and Safety (3) w. Designed to complete the standard course of the American Red Cross in First Aid and to acquaint the student with materials for safety education in the home, school, and community.

HPER 372 School and Community Health Education (3) f,w. Study of the services, facilities, and equipment needed for school and community as they relate to the health of the individual and of the groups.

HPER 458 Care and Prevention of Injuries (3) f,w. Laboratory experiences in the care of athletic injuries. Designed to meet Red Cross First Aid requirements. Open to men only. Prerequisites: Biol 262, and HPER 345. May be taken concurrently with HPER 345.

### PHYSICAL EDUCATION AND RECREATION

HPER 105 Individual Physical Education (1) f,w, sum. Designed for the physically disabled student. Opportunity is procided for the development of physical skills within the limits of the disability.

HPER 150 Foundations of Physical Education I (4) f. Designed to acquaint the student with the philosophical and theoretical background of physical education. Study of the skills and understandings of selected activities; games, sports and rhythm commonly found in the school program. Students will be required to demonstrate minimum levels of proficiency in the various activities covered. Students may be required to enroll in an activity course in areas of weakness. Taught by a team composed of members from both the men and women's physical department. Meets for two periods daily.

HPER 151 Foundations of Physical Education II (4) w. Continuation of HPER 150.

HPER 265 Advanced Swimming and Water Safety (2) f.w. (coed) Techniques of individual safety in water, methods of aiding a person in distress, rescue of a drowned person and resuscitation. Qualifies for Part I of Red Cross Water Safety Instruction. Prerequisite, Intermediate swimming or average swimming ability.

HPER 311 Physical Education for the Elementary School (2) f.w. Study of the methods and materials needed in directing the activity program of games, skills, rhythm, and stunts for the elementary school child. Designed for men and women who are candidates for the elementary teaching crificates. (Non-Majors only).

HPER 312 Elmentary School Physical Education (2) f,w, and on demand. Intended for physical education teachers in the elementary grades. Emphasis is placed upon curriculum development, evaluation, organization of instructional supervision and instructional materials. (Majors only), (See HPER 311).

HPER 330 Methods of Teaching Secondary School Physical Education (2) f or w. Lectures ,deminstrations, small group work, individual conferences, opportunity for participation in teaching physical education activities in the secondary school. (see Ed. 330)

HPER 345 Kinesiology (3) for w. Sudy of bodily movement, posture, muscular exercise, and of selected physical limitations. Development of a program of preventive and corrective measures for the typical student is considered. Emphasis is placed on the muscles of the body and their function. Prerequisite: Bio 262, or equivalent.

HPER 346 Organization of Adapted Physical Education (3) w. Study of the means used to provide a physical education program to fit the needs of the physically handicapped.

HPER 355 Rhythmic Form and Analysis (2) f or w. Analysis of dance forms showing how complex music and dance forms are evolved. Prerequisite, activity course in dance.

HPER 391 Recreational Leadership (3) f. Designed to assist students in gaining a philosophy and understanding of recreation. Considers the practical application of methods, organization, and leadership in recreational activities.

- HPER 420 Teaching and Supervision of Sports and Games I (3) f. A professional course designed for physical education teachers with emphasis on organizing, officiating, and performing of team sports.
- HPER 421 Teaching and Supervision of Sports and Games II (3) w. A professional course designed for physical education teachers with emphasis on organizing, and performing of individual and dual sports.
- HPER 433 Administration of Interscholastic Athletics (2) w. Study of the organization of competitive sports in secondary schools and colleges. Included are legal aspects, current trends in management, budgeting and financing, public relations, and eligibility.
- HPER 434 Administration of the Extra-Class Program in Physical Education (2) f. Study of the organization and conduction of the extra class program in schools; staff functions, student leadership, officiating, facilities, equipment, health and legal aspects. Emphasis on intramural and extramural competition, play days, and sports day.
- HPER 451 Coaching Football (2) f. Attention to team play, systems of offense and defense, field strategy, discussion of rules, training and equipment. (1968)
- HPER 452 Coaching of Basketball (2) w. Organization and management of school football prgram. Systems of offense and defense in basketball. Study of rules, training schedule, discussion of problems arising during training and regular playing season.
- HPER 453 Coaching of Track (2) w. Organization of administration and meets, coaching physical conditioning and training for each event of track and field programs.
- HPER 454 Coaching of Baseball (2) w. Organization and management of a school baseball program to individual techniques ,team play and problems in coaching of baseball.
- HPER 455 Organization and Administration of Health, Physical Education and Recreation (3) f,w, sum. Organization and management of health and physical education in schools; scheduling, personnel, curriculum, finance, equipment, and facilities.
- HPER 461 Independent Study (1-3) f,w. Research of a problem relating to physical education material content, credit, and schedule to be arranged by permission of the department head.

### RULES GOVERNING ACTIVITY COURSES

All freshmen students are required to enroll for a physical education activity course or health education during each semester of their resident attendance, until they have earned four semester hours of credit in this area. (Physical education majors should take HPER 150 and 151).

All freshmen women and men enroll in Physical Education 101 (PE majors 150) during the first semester and Physical Education 102 (PE majors 151) during the second semester. Students are required to complete two additional activity courses of their choice to to complete HPER 162 (majors must take 162).

Varsity athletes should also enroll in the sport of their choice which will replace any activity course requirement except HPER 101 and 102.

A uniform prescribed by the division is to be furnished by each student and is a course requirement.

Physically disabled students should take HPER 105.

#### **ACTIVITY COURSES**

The activity courses listed below are in some cases combined in groups of two or more to provide one hour of credit.

HPER 101 Introduction to Physical Activities I. (1) Men only.

HPER 101 Introduction to Physical Activities I. (1) Women only.

HPER 102 Introduction to Physical Activities II. (1) Men only.

HPER 102 Introduction to Physical Activities II. (1) Women only.

HPER 105 Individual Physical Education. (1)

HPER 108 Elementary Gymnastics and Tumbling. (1) (1967) w.

HPER 208 Intermediate Gymnastics. (1968)

HPER 111 Wrestling, Weight Training, Boxing. (1) Men only. (1968)

HPER 112 Elementary Swimming. (1) (1966)

HPER 212 Intermediate Swimming. (1) (1966)

HPER 115 Touch Football, Speedball, Softball, Basketball. (1) (1967) f.

HPER 116 Track, Volleyball. (1) (1967) f.

HPER 120 Bowling and Golf. (1) (1967) f. Coed.

HPER 121 Tennis and Badminton (1) (1967)

HPER 125 Fencing and Handball and Archery. (1) (1967) f.

HPER 128 Recreational Activities. (1) Coed (1966)

HPER 130 Social Dance (1) (1967) w.

HPER 133 Elementary Modern Dance. (1) (1968)

HPER 230 Intermediate Ballroom Dance. (1) (1968)

HPER 231 Intermediate Folk Dance. (1) (1968)

HPER 233 Intermediate Modern Dance. (1) (1968)

HPER 210 Varsity Basketball. (1) Men only. (1966) w.

HPER 211 Varsity Football. (1) Men only. (1966) w.

HPER 218 Varsity Baseball. (1) Men only. (1969 or 1970) w.

HPER 216 Varsity Track and Field. (1) Men only. (1966)

HPER 213 Varsity Cross Country. (1) Men only. (1966)

Unless otherwise noted, courses listed above have separate sections for women and men. Either an "M" or "W" is added to the course number in the schedule to indicate this reference.

# DIVISION OF BUSINESS AND ECONOMICS

#### **ACCOUNTING**

Acct 101Elementary Accounting I (3) f,w,s. Fundamental principles as applied to modern business practice. Analysis of balance sheet and income statement.

Acct 102 Elementary Accounting II (3) w. A continuation of Accounting principles with emphasis on corporation accounts. Prerequisite: 101 or equivalent training.

Acct 201 Intermediate Accounting (3) f. Application of accounting principles to manufacturing statements, inventories, valuation accounts, and other special topics. Prerequisite: 102.

Acct 202 Cost Accounting (3) w. Study of accounting control as applied to industrial enterprise. Special emphasis on product costs and cost systems. Prerequisite: 201.

Acct 301 Advanced Accounting (3) f. Further development of the theoretical aspects of accounting principles. Prerequisite: 201.

Acct 310 Consolidated Statements (3) w. Preparation of adjusted accounting statements to current complex forms of business organizations. Prerequisite: 201.

Acct 401 Tax Accounting (3) w. Accounting procedures required by current laws, relating to federal and state income taxes. Prerequisite: 201.

Acct 410 Auditing (3) w. Verification principles and analysis, interpretation of records and statements, preparation of working papers. Prerequisite: 201.

#### **ECONOMICS AND FINANCE**

Econ 201 Principles of Economics (3) f,w. A study of fundamental institutions of the American Economy, the theory of price determination, and the theory of income distribution. Prerequisite: Sophomore standing or permission.

Econ 202 Principles of Economics (3) f.w. A study of aggregate economic performance with emphasis on national income stabilization and growth, business cycles, monetary and fiscal policy, international trade, comparative economic systems, and current economic problems. Prerequisite: Principles of Economics No. 201 or permission.

Econ 301 Money and Banking (3) American monetary and banking system, particularly the Federal Reserve System, and its influence on economic activities. Prerequisite: Principles of Economics 201 and 202.

Econ 302 Economic Growth and Development (3) Principles and problems involved in promoting development of the less mature economies, and growth in the more mature economics. Prerequisite: Principles of Economics 201 and 202.

Econ 350 Corporate Finance (3) w. An examination of the financial structure of business organization capital structure and methods of raising fixed and working capital; questions of financial policy, such as dividend policies and the conservation of surplus; comparative balance sheets and income-expense statements. Prerequisite: Economics 201 and 202.

Econ 360 Investments (3) Principles underlying investment analysis and policy; salient characteristics of governmental and corporate securities; policies of investment companies and investing institutions; relation of investment policy to money markets and business fluctuations; security price-making forces. Prerequisite: Corporate Finance 350.

Econ 401 Advanced Economic Analysis (3) An analytical study of the price system, as affecting resource allocation and other welfare questions. Prerequisite: Principles of Economics 201 and 202 or permission.

Econ 402 Government and the National Economy (3) Governmental attempts to a control aggregate activity; improve the social value of business; promotion and moderation of competition. Prerequisite: Principles of Economics 201 and 202 or permission.

#### GENERAL BUSINESS

GBus 101 Introduction to Business (3) f. An introductory course in modern American business, including a study of the capitalistic system, ownership and organization, management problems, marketing, finance, law and taxation.

GBus 105 Business Mathematics (3) f.w. A review of the fundamental processes of mathematics as applied to business. It also includes common and decimal fractions, percentages, markup, interest, bank discount, compound interest, annuities, insurance, payrolls, taxes, and financial statements. It should be taken concurrently with or precede accounting and/or office machines.

GBus 110 Office Machines (3) f,w. A laboratory course in the operation of the office machines found in the modern business office. Training is given in the operation of the ten-key and full-key adding machines, the key-driven rotary and printing calculators, the bookkeeping machine, the transcription machine, and the stencil and spirit duplicators. Emphasis is placed upon the student developing accuracy and speed in working typical business problems. The objective of the course is for the student to develop enough skill in the various machines so that he may obtain initial employment. Meets five days a week.

GBus 111 Office Machines (3) w. An advancement laboratory course, continuing the work as set up in office machines 110. Special emphasis is placed on machine bookkeeping and rotary calculators. The student is also expected to attain additional skill in the operation of the adding machines, the printing and key-driven calculators, and the preparation of more difficult stencils for the stencil duplicator. Meets three days a week. Prerequisite: Office Machines 110.

GBus 120 Business Communications (3) w. The study of principles for writing effective business letters, memos, formal and informal reports and all phases of effective business communications. Prerequisite: English 102 and 103 or permission.

GBus 301 Business Law I (3) A study of the principles of law and its enforcement as applied to American Business. The course includes the study of contracts, agency and employment, negotiable instruments, personal property, and bailments and sales of goods. Special attention is placed on law terminology and cases and problems are used to illustrate the various aspects of business law. Prerequisite: Junior standing or with the consent of the instructor.

GBus 302 Business Law II (3) A contribution of the study of business law as it relates to partnerships, corporations, real property and leases, insurance security devices, bankruptcy, trusts and estates, and government regulations. Cases and problems are used extensively. Prerequisite: Business Law I (301)

### MARKETING AND MANAGEMENT

Mktg 301 Principles of Marketing (3) f,w. A survey of the major marketing methods, institutions and practices. The subjects of retailing, wholesaling, distribution channels, marketing legislation, advertising, cooperative marketing, pricing, marketing research and marketing cost are treated from the standpoint of consumers, middlemen, and manufacturers. Prerequisite: Economics 201 and 202.

Mktg 310 Retailing (3) Principles of successful retail management; analytical and research methods applicable to problems of retail management. Prerequisite: Mktg 301.

Mktg 320 Advertising (3) Description of fundamental advertising principles and their application in mass marketing. Analysis of advertising media, the preparation of advertising, and formulation of campaigns. Prerequisite: Principles of Marketing.

Mgmt 350 Business Organization and Management (3) f.w. A course in business organization and management with application of concepts and techniques to specific, realistic case situations.

Mgmt 335 Personnel Management (3) w. A study of the principles and practices of management with emphasis on the human factors, including procurement, development and maintenance of an effective work force. Prerequisite: Business Organization and Management 350 or consent of instructor.

Mgmt 360 Production Management (3) f. Principles and decision analysis related to the effective utilization of the factors of production in manufacturing activities for both intermittent and continuous systems. The study of production organizations, analytical models and methods, facilities design, and the design of control systems for production operations. Prerequisite: Business Organization and Management 350.

395 Business Policy (3) An integrating course cutting across all fields of business administration. Cases pertaining to top management decision making are used. Prerequisite: Business Organization and Management 350.

Mgmt 415 Marketing Management (3) Managerial aspects of marketing; problems involved in investigations of markets, planning the sales effort, management of sales and service personnel, and control of sales operations. Prerequisite: Business Organization and Management 350 and Principles of Marketing 301.

#### OFFICE ADMINISTRATION

Ofad 101 Typewriting (elementary typewriting) (3) The chief emphasis in this course is to learn to manipulate the typewriter efficiently. The development of speed is stressed so that the student will, upon completion of the course, have a fair rate which will be of use to him personally. A few simple letter styles are taught as well as manuscript writing and simple tabulation.

Ofad 102 Typewriting (intermediate typewriting) (3) w. This is primarily a letter-writing course. All the styles of business and personal letters are studied and written. Efficient methods of writing more difficult manuscript and tabulations are also studied. Minimum requirement for passing is the ability to type 40 words per-minute for ten minutes within the 5-error limit. Prerequisite: Typing 101 or a good knowledge of the keyboard.

Ofad 110 Shorthand (Elementary) A theory course in which the principles of shorthand are studied. Vocabulary building is stressed. Not open to students who have completed one year of shorthand in high school. Typewriting should precede or parallel the course. Class meets five days per week.

Ofad 111 Shorthand (3) f,w. (Intermediate) A dictation course in which the theory has been completed. It is a review of theory, and special attention will be given to developing efficient transcription procedures. Dictation will range from 60 to 100 words per-minute, depending upon the ability of the students. The minimum speed requirement by the end of the semester is to write at least 80 words per-minute with 95 per cent accuracy. Prerequisite: Shorthand 110 or any course in which the theory has been completed.

Ofad 201 Typewriting (advanced) (3) Production of mailable letters, manuscripts, reports, addressing envelopes, business forms and legal typing is emphasized. Minimum passing requirement is 60 words per-minute for ten minutes with the 5-error limit. Prerequisite: Typewriting 102 or the ability to type 40 words per minute and a knowledge of letter writing.

Ofad 210 Shorthand (3) f (advanced shorthand). The emphasis in this course is to develop accuracy in transcription as well as to increase the rate of transcription. Dictation will range from 80 to 140 words per minute. The minimum requirement by the end of the semester is at least 100 words per minute with 95 per cent or more accuracy. Prerequisite: Shorthand 111 or the ability to take dictation at 80 words per minute.

Ofad 220 Dictation and Transcription (3) This is a course for the development of expert stenographers. A great deal of emphasis is placed upon accuracy and rate of transcription, and production of mailable letters. Dictation will range from 100 words per minute to 160 words per minute. The minimum requirement by the end of the semester is at least 120 words per minute with at least 95 per cent accuracy. Prerequisite: Shorthand 210 or the ability to take dictation at 100 words per minute.

Ofad 250 Secretarial Procedures (3) w. Business ethics, secretarial duties common to all lines of business, such as handling mail, meeting callers, using the telephone, etc. The student receives instructions in the use of present day filing systems and their application to the various types of business. This course is offered for sophomores in the Office Administration curriculum. Freshmen may be admitted by permission of the instructor.

Ofad 330 Methods of Teaching Business (2) w. Special methods of instruction problems, and difficulties peculiar to the teaching of each busness subject; presentation of subject matter; content and arrangement of material, organization and administration. Prerequisite: At least one course in Education and one course in psychology. Two hours credit in Education. (See Ed. 330).

# DIVISION OF HUMANITIES AND FINE ARTS

#### ART

Art 101 Art Composition (3) f,w. Introductory course using fundamental techniques and media. Foundation course for all art majors.

Art 102 Introduction to Art (3) f,w. A general survey course designed to increase appreciation of visual art. For non-art majors and required for all art majors.

Art 103 Ceramics (3) f,w. Methods and techniques of hand building are studied with application to modeling and throwing clay forms. Prerequisite: 101 or 102.

Art 104 Drawing Techniques (3) f,w. Free-hand drawing problems using various drawing tools and techniques used by master artists. Pre-requisite: 101.

- Art 105 Introduction to Design (3) w. Foundation course using problems involving art principles and elements, Prerequisite: none.
- Art 201 Arts and Crafts (3) f,w. General crafts course involving leather tooling, block printing, pottery, weaving and some graphics. May be taken by non-art majors.
- Art 202 Sculpture Techniques (3) f. Study of various sculptural problems and techniques in stone, clay, wood, and mixed media. Prerequisite: Art 101, 103, or 105.
- Art 203 Art Education (3) f,w. Course designed to develop understanding of the problems in teaching art with emphasis on methods of teaching various art problems. Required of all Elementary Education Majors. No Prerequisite.
- Art 204 Basic Form (3) f.w. Study of relationships of parts to form. Problems include two and three dimensional. Prerequisite: Art 102 or Art 105.
- Art 205 Painting (3) w. Procedures, techniques, and fundamentals of painting, media-oil watercolor, and mixed. Prerequisite: Art 101.
- Art 301 Art History (3) f. Survey of the development of man's artistic endeavors from Stone age to the Early Renasissance. Text required. Prerequisite: junior standing.
- Art 302 Art History (3) w. Continuation of 301 from the Early Renaissance in Italy to the present art styles. Same text as for Art 301. Prerequisite: junior standing.
- Art 303 Drawing (3) f,w. Investigation of various art drawing media. Life, still life, and landscape used as subject matter. Prerequisite: Art 101, 104, 105, or approval of the instructor.
- Art 304 Watercolor (3) f,w. Technical and aesthetic understanding of watercolor with various subject matters encouraged. Prerequisite: Art 104.
- Art 305 Sculpture I (3) Various media (Stone, Marble Wood) are chosen by the student for investigation. Prerequisite: Art 202.
  - Art 306 Sculpture II (3) Continuation of Sculpture 305.
- Art 401 Oil Painting (3) f. Student selects an individual problem for investigation. Techniques, history, and appreciation of oil painting surveyed for understanding. Prerequisite: Art 205.
- Art 402 Commercial Art (3) w. Lettering, layout, and design techniques. Survey of various reproductive processes. Prerequisite: Art 105 and 204.
- Art 403 Head Study (3) w. Fundamental methods in portraiture. Various drawing and painting media for structure of the head. Artistic head anatomy used for each head study. Prequisite: Art 105 and 204.

- Art 404 Graphics (3) f. Initial laboratory exercises in various graphic processes; etching, engraving, block print, and lithography. Prerequisite: Art 303.
- Art 405 Independent Study (2) f. Special study in any area as determined in consultation with major advisor.
- Art 406 Independent Study (2) w. Special study in any area as determined in consultation with major advisor.

#### **ENGLISH**

- Engl 100 Composition (3) f,w,s. A course designed for students whose placement scores indicate a need for additional work. Three hours of class work and two hours of laboratory per week. No credit toward Baccalaureate Degree or Associate in Arts Degree.
- Engl 102 Composition (3) f,w,s. A study of the principles of effective writing based largely upon expository prose models. Students demonstrating exceptional ability may be permitted to substitute English 104.
- Engl 103 Composition (3) f,w,s. A course that develops reading comprehension through a study of various types of literature and offers practice in expository writing. Prerequisite: Engl 102.
- Engl 104 Composition (6) f. A special composition and literature course for freshmen who demonstrate exceptional proficiency on placement tests.
- Engl 106 Masterpieces of World Literature (3) f. Selected masterpieces of world literature through the Renaissance.
- Engl 107 Masterpieces of World Literature (3) w. Selected masterpieces of world literature from the Renaissance to the present.
- Engl 115 Introduction to Journalism (3) f. A study of vocational opportunities in journalism and requirements for the professional. Basic principles of journalistic writing and glossary.
- Engl 116 News Writing (3) w. A study of news of some complexity; editing, copy reading and proofreading. Practical work on the college newspaper, The Chart. Prerequisite: 115 or consent of instructor.
- Engl 202 Exposition (3) f,w,s. A study of the techniques of factual writing and the writing of nonfiction. Recommended for all students, especially those entering professional schools. Prerequisite: 6 hours composition and sophomore standing.
- Engl 207 English Literature (3) f,w. Survey of English literature to the Romantic Movement. Prerequisite: Engl 103 or 105.
- Engl 208 English Literature (3) f.w. Survey of English literature from the Romantic Movement to the present. Prerequisite: Engl 103 or 105.

- Engl 210 Children's Literature (2) w. A reading, lecture, and observation course for elementary education students, including evaluation of children's literature, its historical development, and its uses in elementary schools. Prerequisite: Sophomore standing.
- Engl 215 Practical Journalism (3) f,w,s. Application of journalistic principles to the college newspaper. Enrolling for one hour of credit each term, a student receives no credit until he has completed three terms. Prerequisite: Engl 116 or consent of instructor.
- Engl 216 Feature Writing (3) f. Advanced course in writing special articles for newspapers and magazines. Practical work on college publications. Prerequisite: Engl 116 or consent of instructor.
- Engl 305 Structure of American English (3) f. A study of current English structure and usage. Required for prospective teachers. Prerequisite: Junior standing.
- Engl 307 American Literature (3) f. A survey of American literature to the Civil War. Prerequisite: Junior standing.
- Engl 308 American Literature (3) w. Survey of American Literature beginning with the Civil War. Prerequisite: Junior standing.
- Engl 310 Medieval English Literature (3) f. Literature of England during the Middle Ages.
- Engl 312 Shakespeare (3) f. A study of selected histories and early comedies.
- Engl 313 Shakespeare (3) w. A study of selected tragedies and late comedies.
- Engl 315 Editorial Writing (3) w. An analysis of editorials appearing in responsible publications and the writing of editorials of some maturity.
- Engl 317 American Novel (3) w. A study of representative American novels.
- Engl 319 School Publications (2) w. A study of editorial and business problems of high school newspapers and yearbooks, including headline writing, layout, staff organization, photography, advertising, and art themes.
- Engl 320 Seventeenth Century English Literature (3) Prose, poetry, and drama.
- Engl 331 The Romantic Period (3) f. Representative authors and literary tendencies.
- Engl 332 The Victorian Period (3) f. Representative authors and literary tendencies.
- Engl 330 Methods of teaching the Language Arts in Secondary Schools (2) w. See Ed. 330
- Engl 340 Twentieth Century Literature (3) w. Selected works of outstanding writers since 1900.

Engl 410 Literature of the English Renaissance (3) w. Prose, poetry, and drama.

Engl 440 Exporations in Literature (3) w. Special studies in literature for seniors majoring in English.

#### FOREIGN LANGUAGES

Students presenting no high school units in the foreign language in question should take No. 101. Those with 1 high school unit should take No. 101 for 3 hours credit. Students with 2 high school units should take 102. Students with 3 high school units may take No. 102 for 3 hours credit, or 201.

#### **SPANISH**

Span 101 Elementary Spanish (5) f. Conversation and vocabulary building. Pronunciation proficiency and grammar essentials. Conducted in Spanish as far as practicable. Language Laboratory required. Prerequisite: none.

Span 102 Intermediate Spanish (5) w. Intermediate reading and composition. Stressing of conversation. Conducted mainly in Spanish. Language Laboratory required. Prerequisite: 101 or equivalent.

Span 201 Spanish Conversation and Composition (3) f. Practice in comprehension of spoken Spanish with oral and written composition in idiomatic Spanish. Conducted in Spanish. Language Laboratory required. Prerequisite: 102 or equivalent.

Span 202 Reading in Spanish Literature (3) w. Representative works are read and discussed (in Spanish) with emphasis on similarities due to political, social, and geographical conditions. Novel, poetry, and short story. Prerequisite: Spanish 201 or equivalent.

Span 209 Commercial Spanish (2) w. Fundamentals of business and personal correspondence. Practical application to business. Prerequisite: 201 or equivalent.

Span 303 Advanced Spanish Composition (3) f. Practice in writing Spanish accompanied by a thorough study of grammar and syntax with emphasis on the subtle elements of idiomatic usage. Prerequisite: 202.

Span 306 Survey of Spanish Literature (3) f. The literary background and important writers from the origin of Spanish Literature to 1700. Representative works read and discussed, with written and oral reports. Prerequisite: 202.

Span 307 Survey of Spanish Literature (3) Spanish Literature from 1700 to the present. Representative works read and examined critically, with written and oral reports and discussions. Prerequisite: 202.

Span 325 Introduction to Spanish-American Literature (3) w. Representative works of poetry, short story, and essay are read and discussed. Prerequisite: 303.

Span 425 Nineteenth Century Spanish Novel (3) f. The Spanish Novel as an art form, exemplified by reading and discussion of selected works by such writers as Alacron, Valera, Pereda, Galdos, Pardo Bazan, Palacio Valdes, and Blasco Ibanez. Prerequisite: 307.

Span 435 Don Quijote (3) f. The source, structure, characters, language, and style of Cervantes' great masterpiece. Prerequisite: 307.

#### **FRENCH**

Fr 101 Elementary French (5) w. Conversation and vocabulary building. Pronunciation proficiency and grammar essentials. Language Laboratory required. Conducted in French as far as practicable. Prerequisite: none.

Fr 102 Intermediate French (5) w. Intermediate reading and composition. Stressing of conversation. Language Laboratory required. Conducted mainly in French. Prerequisite: 101 or equivalent.

Fr 201 French Conversation and Composition (3) f. Practice in comprehension of spoken French with oral and written composition in idiomatic French. Conducted in French. Language Laboratory required. Prerequisite: 102 or equivalent.

Fr 202 Readings in French Literature (3) w. Representative works are read and discussed (in French). Novel, poetry, and short story. Prerequisite:i 201.

Fr 303 Advanced French Composition (3) f. Practice in writing French accompanied by a thorough study of grammar and syntax with emphasis on the subtle elements of idiomatic useage. Prerequisite: 202.

Fr 306 Survey of French Literature (3) f. Selected readings in French Literature from the early Middle Ages through the 17th century. Written and oral reports and discussions. Prerequisite: 202.

Fr 307 Survey of French Literature (3) w. A selection of readings in French Literature from 1700 to the present. Written and oral reports and discussions. Prerequisite: 202.

#### **GERMAN**

Ger 101 Elementary German (5) f. Conservation and vocabulary building. Pronunciation proficiency and grammar essentials. Conducted in German as far as practicable. Language Laboratory required. Prerequisite: none.

Ger 102 Intermediate German (5) w. Intermediate reading and composition. Stressing of conversation. Conducted mainly in German. Language Laboratory required. Prerequisite: 101 or equivalent.

Ger 201 German Conversation and Composition (3) f. Practice in comprehension of spoken German with oral and written composition in idiomatic German. Conducted in German. Language Laboratory required. Prerequisite: 102.

Ger 202 Readings in German Literature (3) w. Representative works read and discussed in German. Novel, poetry, and short story. Prerequisite: 201.

#### MUSIC

- Mus 121 Music Theory (3) f. Intensive study of basic materials of music developed through melodic, rhythmic, and harmonic dictation, sight-singing, keyboard and written harmony. Triads, their inversions and connections. For music majors. Others by consent of the instructor. Five meetings per week.
- Mus 122 Music Theory (3) w. Continuation of Music 121. Includes seventh chords and their inversions and non-harmonic tones. Intensive work in ear-training and keyboard harmony. Prerequisite: Music 121. Five meetings per week.
- Mus 150 Music Appreciation (3) f,w. Designed to give the non-music major an insight into musical masterpieces from all eras of music literature. No credit for music majors.
- Mus 170 Choir (1) f,w. Open to all college students by audition only. Preparation and performance of great choral works. Prerequisite: Permission of the instructor.
- Mus 172 Lab Band (Stage Band) f,w. Open to all college students who are qualified instrumentalists. The Lab Band will prepare and present several concerts during the year, while dealing primarily with music of the jazz idiom. Prerequisite: Permission of the instructor.
- Mus 173 Orchestra (1) f.w. Open to all college students who play an orchestral instrument. The orchestra will present five public concerts each year, performing standard orchestral literature. Prerequisite: Permission of the instructor.
- Mus 174 Vocal Ensemble (1) f,w. Small select ensemble from the membership of the college choir. Performs all literature from madrigal to modern music, written for small vocal ensemble. Prerequisite: Membership in choir.
- Mus 175 Brass Choir (1) f,w. Performance of literature for brass ensemble. Open to all qualified students. One meeting per week.
- Mus 136 Choral Techniques (1) f. Technique of baton, factors in interpretation, score reading, rehearsal procedures for choral organizations, program building, and public appearances.
- Mus 137 Instrumental Conducting Techniques (1) w. Technique of baton, factors in interpretation, score reading, rehearsal procedures for instrumental organizations, program building, and public appearances. Laboratory work with the college Concert Band and Orchestra.
- Mus 139 Marching Band Techniques (1) w. Procedures used in organizing, promoting, drilling, transporting, uniforming, and sustaining a high school marching band. Deals with problems in charting a half time show and the co-ordinating of suitable music.

#### Instrumental and Vocal Techniques

Mus 130 Brass Techniques (1) f.

Mus 131 Brass Techniques (1) w.

Mus 132 String Techniques (1) f.

Mus 133 String Techniques (1) w. Mus 134 Woodwind Techniques (1) f.

Mus 135 Woodwind Techniques (1) v.

Mus 138 Percussion Techniques (1) f.

#### Applied Music

Mus 100 (1-2) f,w. Mus 101 (1-2) f,w. Mus 200 (1-2) f,w. Mus 201 (1-2) f,w. Mus 300 (1-2) f,w. Mus 301 (1-2) f,w. Mus 400 (1-2) f,w. Mus 401 (1-2) f,w. Class instruction in he orchestral and band instruments. This class instruction will include a study of methods and materials to be used in the teaching of a beginning student. Given on a laboratory basis with two recitations a week.

Private instruction in piano, organ, voice, trumpet, trombone, French horn, violin, viola, cello, double bass, flute, clarinet, oboe, saxophone, bassoon, and percussion. Credit variable. One hour lessons per week in major. Jury examination required. Lessons by arrangement with approved instructors.

Mus 221 Music Theory (3) f. Altered chords and modulation. Advanced work in ear-training and keyboard harmony. Introduction to contemporary techniques and composition in simple forms. Prerequisite: Music 122. Five meetings per week.

Mus 222 Music Theory (3) Modal harmony. Advanced part-writing procedures. Emphasis on keyboard harmony. Prerequisite: Music 221, Five meetings per week.

Music 260 Music for the Elementary School (3) w. Emphasis on methods of teaching music in the elementary classroom and a study of materials to be used. Prerequisite: None.

Mus 322 Form and Analysis (3) f. Harmonic and formal analysis of compositions from classic era, formal analysis of compositions from preclassic era, and introduction to contemporary principles. Prerequisite: Music 222.

Mus 323 Orchestration (2) w. Capacities of orchestral instruments. Scoring for various orchestral combinations, including full orchestra. Prerequisite: Music 222.

Mus 350 History of Music (3) f. General survey of history of music from Greek period to 18th century. Score reading required.

Mus 351 History of Music (3) w. General survey of history of music from 18th century to the present. Score reading required.

Mus 330 Methods of Teaching Secondary School Music (2) f. Methods and materials used in teaching instrumental and choral music in Junior high and high school. (See Educ 330).

#### SPEECH AND DRAMA

- Sp 101 Speech Techniques (3) f.w. A practical course designed to improve or to develop self-expression. Emphasis is placed on development of principles of effective oral communications. Prerequisite: English 102, or 50 percent or higher on English placement test.
- Sp 102 Voice and Articulation (3) f,w. Techniques for improving the speaking voice. Attention to phonetics, articulation, pronunciation, and general expression.
- Dr 121 Introduction to the Theatre (3) f. Survey of contributions to dramatic production of all ages by playwrights, directors, designers. Appreciation of dramatic form and style. A humanities course for the non-drama major. Prerequisite: none.
- Dr 142, 152, 242, 252 Theatre Laboratory (1) f.w. A laboratory and, whenever possible, lecture course devoted to the mounting of major productions. A total of 4 hours may be taken. Prerequisite: none.
- Sp 201 Public Speaking (3) f,w. Practice in preparation and delivery of impromptu and extemporaneous speeches. Prerequisite: English 102 or 104 and completion of 1 unit of high school speech or Speech 101.
- Dr 201 Summer Theatre Production (6) s. Includes active participation in the summer theatre presentations. Special instruction in voice and diction, movement, acting and basic stagecraft.
- NOTE: Drama 201 A summer theatre program running concurrently with the summer session is to be inaugurated in the summer of 1967 with the opening of the Barn Theatre. The first session will consist of at least two productions. A student enrolling in Drama 201 becomes a member of the resident company composed of area people, faculty, and students. In addition to the production participation the student receives training in voice and diction, movement, acting, and basic stagecraft. Each student apprentice enrolled receives a total of 6 semester hours credit.
- Sp 215 **Oral Interpretation** (3) w. Study and application of principles and techniques of oral reading. Includes analysis of different types of literature with emphasis upon platform presentation of prose and poetry. **Prerequisite:** sophomore standing.
- Sp 301 Discussion (3) f. Study and application of procedures used in solving problems, determining policies, and resolving differences in committees or other small groups. Prerequisite: Speech 101 or Speech 201.
- Dr 332 Development of the Drama (3) f. History and study of the development of theatre and theatre arts; forms, syle, and structure of drama from the Greeks to the Elizabethan era.
- Dr 333 Development of the Drama (3) w. Jacobean to contemporary American theatre. May be taken without having had Drama 332.
- Dr 342 Beginning Acting (3) f,w. A basic performance and theory course, analysis and creation of a role; stage movement and pantomine; basic stage techniques. Problems in stage speech and dialects for the stage.

- Dr 352 Play Production (3) f. A course dealing with techniques and problems of mounting a play. Includes a basic analysis of the construction of the drama, along with basic elements of costume, stagecraft and makeup.
- Dr 362 Stage Costume and Design (3) w. Survey of available materials, period costume, and practical experience in the rendering of costume designs to actual stage costumes.
- Dr 372 Directing for the Stage (3) w. Study of the skill and role of the director, script analysis, casting, production administration, and director actor relationships. Each student enrolled will have a directing project or will assist the staff as student director for a major production.
- Sp 401 Teaching of Speech & Drama (2) f. Investigation of standards, methods, and materials for teaching speech and conducting extra curricular speech activities in the high school. Sec. Educ. 330.
- Dr 421 Styles in Acting and Interpretation (3) w. Lecture and laboratory study of physical manners, posture, movement, rhythm, gestures, and vocal qualities in relation to various periods of theatre presentation. Prerequisite: Drama 342.
- Dr 431 Children's Theatre (3) f. Survey of all forms of literature for children for use in presentation. Laboratory study of various staging techniques in production for children. Prerequisites: Drama 342 and Speech 215.
- Dr 441 Elementary Stage Design (3) f. Principles and history of scenic design, sketching, rendering, scene painting techniques. Principles of stage lighting approached from practical and aesthetic values. Prerequisite: Drama 352.
- Dr 442 Advanced Stage Design (3) w. Study of design as related to various forms, styles of drama. Application of principles taught in Drama 441. Special problems in design, lighting. Prerequisite: Drama 441.

# DIVISION OF SCIENCE AND MATHEMATICS

#### BIOLOGY

BIO 101 General Biology (5) f,w, sum. One semester general education course for students desiring knowledge of the plant and animal kingdoms. Deals with the physiological aspects of life, cells, tissues and organs as exemplified by plants and animals, and a general survey of the plant and animal kingdoms. Three lectures and two 2 hour labs/week. Prerequisite: none.

- BIO 110 General Botany (5) f,w. Scientific study of biological principles as applied to plants. Includes such topics of study as structure and functions of higher plants, cytology, genetics, history, reproduction, physiology and evolution as exemplified by various members of the plant kingdom. A survey of the plant kingdom is included as an integral part of the study. Three lectures and two 2 hour labs/week. Prerequisite: none.
- BIO 120 General Zoology (5) f,w. Scientific study of biological principles as applied to animals. Includes such topics of study as cytology, history, genetics, embryology and evolution. A survey of the animal kingdom is made with specific consideration given to the morphology, physiology and reproduction of its various members. Major emphasis is placed on the anatomy and physiology of man in the animal kingdom survey. Three lectures and two 2 hour labs/week. Prerequisite: none.
- BIO 200 Genetics (3) w. Comprehensive introduction to the principles of heredity and variation as exemplified by both the higher plants and animals. Emphasis will be placed on the cytological and molecular approach to gene action, linkage, crossing over and various other genetic mechanisms such as sex-linkage and mutations. Three lectures a week. Prerequisites: Biology 101, 110 or 120.
- BIO 210 Microbiology (5) f. Scientific study of the principles of general microbiology with special emphasis on the anatomy, nutrition, physiology and chemistry of bacteria, fungi and other microscopic organisms. The cyclic transformations of elements in nature by microbial activities and the economic aspects associated with industry and medicine will be considered. Three lectures and two 2 hour labs/week. Prerequisites: Biology 101 or 110 and one year of inorganic chemistry or permission of the instructor.
- BIO 220 Human Anatomy and Physiology (5) f. Designed to acquaint the student with the development, structure and functions of the human body. Topics include the skeletal and muscular systems, circulation, metabolism, digestion, respiration, the nervous system, the endocrine glands, special senses, embryology and reproduction. Three lectures and two 2 hour labs/week. Prerequisites: Biology 120 w/a grade of C or permission of the instructor.
- BIO 300 History of Biology (2) w. A historical survey into the origin and development of the fundamental concepts of biology as well as contemporary developments in the field of biological research. Two 1 hour lectures a week. Prerequisite: Junior standing or consent of the instructor.
- BIO 301 Natural History (3-5) f, sum. A course designed to acquaint students with identification, structure, life history, habits and the conservation of common plants and animals with particular emphasis on local species. Designed for elementary and Jr. High teachers and interested members of the community. Not applicable toward a biological science major or minor. Three hours credit for winter semester and five hours credit for summer only. Prerequisite: none.

- BIO 302 Field Biology (2) f,w, sum. The course engenders appreciation and understanding of the local flora and fauna, and provides information pertinent to preparation and preservation of specimens for laboratory use. Consist of one lecture and one two hour laboratory each week. At least one Saturday field trip will be required. Prerequisite: General Biology 101 or permission of instructor.
- BIO 310 Taxonomy of Flowering Plants (4) w. Designed to acquaint the student with the relationships among selected plant groups, classification and descriptions of taxa, nomenclature and concepts concerning the evolutionary sequence of various plant characters. Southwestern Missouri flora will be emphasized. Three lectures and one, 3 hour lab/week. Prerequisite: Biology 110.
- BIO 311 Plant Physiology (5) f. A study of the life processes of plants including metabolism, translocation, growth ,development, reproduction and response to internal and external stimuli. Emphasis will be placed on the chemistry of the plant's physiological activities. Three lectures and two, 2 hour labs/week. Prerequisite: Biology 110, and one year of inorganic chemistry. (organic chemistry recommended).
- BIO 320 Comparative Chordate Anatomy (5) f. Designed for the serious student of biology or those students planning to enter professional schools of medicine, dentistry or veterinary science. Acquaints the student with the evolutionary trends of chordate structure development with special emphasis on the vertebrate organs and organ systems. Two lectures and three, 2 hour labs/week. Prerequisite: Biology 120.
- BIO 321 Invertebrate Zoology (5) f. Classification, morphology, physiology, development and evolution of invertebrate animals. Three lectures and two, 2 hour labs/per week. Prerequisite: Biology 120.

BIO 330 Teaching of Science in Secondary School (2) See Education 330.

- BIO 409 General Ecology (4) w. A study of plant and animal communities in relation to their environment, placing special emphasis on the flora and fauna of Southwest Missouri. Soils, climate and other major environmental factors responsible for the distribution and association of plants and animals will also be considered. Two lectures and one, 3 hour lab/week. Prerequisite: Biology 110, 120, and 310 or consent of the instructor.
- BIO 410 Plant Anatomy (5) f. A comprehensive study of tissues and cellular structure in the higher plants including a comparative study of the structure of roots, stems and leaves of the vascular plants. Emphasis will be given to evolution and development of the various tissues. Three lectures and two, 2 hour labs/week. Prerequisite: Biology 110.
- BIO 411 Plant Morphology (5) f. A comprehensive study of the comparative structures, life histories and evolutionary tendencies concerning the vegetative and reproductive organs of the major groups of green plants. Three lectures and two, 2 hour labs/week. Prerequisite: Biology 110.

- BIO 420 Animal Physiology (5) f. A comprehensive coverage of the chemical and physical phenomena occurring within living animals, with major emphasis placed on man. Three lectures and two, 2 hour labs/week. Prerequisite: Ten hours of biology and chemistry through organic required. It is strongly recommended that the student also have 5 hours of physics and comparative anatomy.
- BIO 425 Vertebrate Zoology (5) w. Classification, morphology, physiology, development and evolution of the classes of vertebrate animals. Three lectures and two, 2 hour labs/per week. Prerequisite: Biology 120.
- BIO 426 Histology (5) w. A detailed study of microscopic structure of animal tissues and organs with special emphasis on mammalian tissues. Three lectures and two, 2 hour labs/week. Prerequisite: Ten hours of zoology or consent of the instructor.
- BIO 427 Embryology (5) w. A study including detailed comparisons of developmental processes of members of the classes of vertebrates. Three lectures and two, 2 hour labs/per week. Prerequisite: Biology 120 and or Biology 320.
- BIO 430 Seminar (1) f,w. A faculty supervised discussion group concerned with reviews and reports covering current topics in the various fields of biology. Faculty members as well as students, will present reviews in their various areas of interest. One seminar/week. Prerequisites: Primarily for biology majors of junior standing or other interested students with at least 15 hours of biological science.
- BIO 431 Problems in Biology (1.3) f,w, sum. Consist of individual work under the supervision of a staff member, with the credit and hours to be arranged. Problems may be undertaken in any field of biology, with adequate preparation and the consent of the supervising instructor. Prerequisite: A minimum of 20 hours in biology and consent of the supervising instructor.

#### **CHEMISTRY**

- CHEM 105 Introductory Chemistry (5) f,w. The basic principles and theories of general chemistry. Primarily designed as a terminal course in chemistry.
- CHEM 115 General Chemistry I (5) f,w. Introduction to theories of chemistry with emphasis on the relationship of structure to properties of matter and the quantitative aspect of changes. Three lectures, one 3-period laboratory, and one problem-solving session per week. Prerequisites: one and a half units of high school algebra, and a satisfactory score on an entrance test or Algebra 022, or Introduction to the Logic of Mathematics 103.

- CHEM 153 General Chemistry II (3) f,w. A continuation of General Chemistry I. Emphasis on applications of chemical equilibrium, electro-chemistry, aqueous solutions, and the chemistry of the elements as periodic groups. Three lectures and one problem-solving session per week. Prerequisite: General Chemistry I with a minimum grade of "C" or permission of instructor.
- CHEM 163 Qualitative Analysis (3) w. Identification of cations and anions. Application of principles presented in General Chemistry II. One lecture and six periods of laboratory per week. Prerequisite: Preceded or accompanied by General Chemistry II.
- CHEM 205 Quantitative Analysis. (5) f. Includes volumetric, gravimetric, and some potentiometric and spectrophotometric analyses. Three lectures and two three-period laboratories per week. Prerequisite: Eight hours of college chemistry.
- CHEM 315 Organic Chemitry I (5) f,w. Deals with both aliphatic and aromatic compounds, their structure, nomenclature, and reaction mechanisms. Three lectures and two three-period laboratories per week. Prerequisite: Five hours of college chemistry.
- CHEM 355 Organic Chemistry II (5) w. A continuation of CHEM 315. An extensive treatment of substitution, elimination, addition, free radical reactions and special topics. Prerequisite CHEM 315.
- CHEM 405 Physical Chemistry I (5) f. Gases, solids, liquids, homogeneous and heterogeneous solutions and thermodynamics. Theoretical derivations of equations and mathematical treatments of physical and chemical phenomena. Lectures, discussions and laboratory work. Prerequisites: Math 145, 255 and a year of college physics.
- CHEM 415 Instrumental Analysis (5) f. Special analytical techniques using spectrophotometry, gas-chomatography, colorimetry, and electrometric methods to include potentiometric, conductometric, polargraphic, and electrogravimetric analysis. Prerequisite: Chem 205.
- CHEM 453 Physical Chemistry II (3) w. A continuation of CHEM 405. The study of chemical kinetics, electromotive force, photochemistry, colloid chemistry, and atomic and molecular structure. Prerequisite: CHEM 405.
- CHEM 455 Advanced Inorganic Chemistry (3) w. Modern inorganic chemistry with emphasis upon coordination complexes, periodic classification of the non-transitional and transitional elements. Prerequisite: CHEM 153.
- CHEM 462 Physical Chemistry II Laboratory (2) w. Laboratory to accompany CHEM 453.
- CHEM 463 Organic Qualitative Analysis (3) w. Systematic identification of organic compounds and mixtures. Prerequisite CHEM 355.

#### GEOLOGY

Geol 103 Introduction to Geology (5) f,w. The materials of the earth and those forces producing physiographic changes. Four lectures and one, two-hour laboratory or field trip a week.

#### DRAFTING

Draf 101 Engineering Drawing I (2) f. Study of use of drawing instruments, lettering, technical sketching, tracing and blue printing. A.S.A. standards are basis for drafting conventions.

Draf 103 Descriptive Geometry (2) w. Practical applications of principles to problems of geology and mining, and mechanical and architectural engineering. Prerequisite, Engineering Drawing 101.

Draf 105 Engineering Drawing II (2) w. Screw thread, bolts and nuts, detail and assembly, gear and cam design topographical and pattern drafting. Prerequisite: Engineering Drawing 101.

Draf 107 Architectural Drawing (2) w. The fundamental principles of house planning, including materials of construction and room arrangements. Plans will be drawn of some suitable building. Prerequisite: Engineering Drawing 101.

#### **MATHEMATICS**

Math 002 Programmed course in basic mathematics for students who are deficient in general mathematical skills. (2)

Math 012 Pragrammed course in beginning algebra. (2)

Math 022 Programmed course in intermediate algebra. (2)

Note: No more than 2 hours credit in programmed courses will count toward an associate degree and no credit will be given for the Baccalaureate degree.

Math 101 Slide Rule (1) f,w. A laboratory course in the use of a log-log rule. A student may be excused if he passes a proficiency test. Meets two hours a week. Prerequisite: trigonometry or concurrent enrollment in trigonometry.

Math 103 Introduction to the Logic of Mathematics (3) f,w. Basic college mathematics with an introduction to sets and the logic of algebra. This course will satisfy the requirement in mathematics for general education. Prerequisite: One year of high school mathematics.

Math 112 Trigonometry (2) w. Study of trigonometric functions. Prerequisite: One and one half units of high school algebra or the equivalent.

Math 113 College Algebra (3) f.w. A course designed for students not majoring in the fields of math, science or engineering. Prerequisite: One and one half units in high school algebra or the equivalent.

Math 115 Algebra and Trigonometry (5) f,w. This course is the equivalent of Math 112 and Math 113. Prerequisite: Three units of high school mathematics and satisfactory score on mathematics placement test. Students not meeting these requirements must make a satisfactory score in Math 022 or 103.

Math 133 Introduction to Programming (2). A study of digital computer systems, programming of a digital computer and the solution of problems. Prerequisite: Math 115.

Math 145 Calculus with Analytic Geometry I (5) f,w. Differentiation and integration of algebraic and trigonometric functions, and plane analytic geometry using vectors. Prerequisite: Math 115 with a grade of C, or four units of high school mathematics and satisfactory score on the mathematics placement test.

Math 255 Calculus with Analytic Geometry II (5) f,w. Differentiation and integration of transcendental functions, polar coordinates, theory of limits, parametric equations. Applications to physical problems. Prerequisite: Math 145 with a grade of C.

Math 265 Calculus with Analytic Geometry III (5) f,w. Solid analytic geometry, infinite series, partial differentiation and mutiple integrals. Prerequisite: Math 255.

Math 301 Selected Topics in Mathematics (1) A course to enrich the student's knowledge and promote his interest in various areas of mathematics, especially in the area of modern mathematics. Prerequisite: Math 145.

Math 303 Fundamentals of Mathematical Thought (3) f. An introduction to modern algebra and analysis. Sets, relations, functions, logical development of number systems, infinite series,, introduction to theory of groups, rings, integral domains, and fields. Prerequisite: Math 265.

Math 315 Statistics (3) w. Introduction to the basic concepts of statistical inference and to the methods of statistical analysis. Designed for non-math majors. Prerequisite: Math 113 or equivalent.

Math 317 Problems of Teaching Arithmetic in the Elementary, Schools (2) w. Presents purposes, techniques, materials. Also observation of arithmetic classes in public schools. Prerequisite: Math 103 (or an equivalent course).

Math 323 Differential Equations (3) w. Standard types of ordinary differential equations of the first and second order, linear equations with constant coefficients and applications to geometry and physical science. Prerequisite: Math 265.

Math 330 Teaching of Mathematics in the Secondary Schools. (2) w. See Education 330 for description.

Math 333 Geometry (3) w. Concentrated Euclidian geometry theory from a modern axiomatic viewpoint. Includes an introduction to projective and differential geometry. Recommended for prospective secondary mathematics teachers.

Math 343 Abstract Algebra (3) w. Prerequisite or concurrent registration in Math 303. Number theory, equivalence and congruence, theory of groups, rings, ideals, integral domains, and fields.

Math 353 Linear Algebra (3) f. The algebra of linear equations and matrices, vector spaces, linear mappings and transformations, determinants, bilinear and quadratic forms, linear functionals, vector inner products and cross products. Prerequisite: Math 145.

Math 363 Probability and Statistics (3) f. Introduction to theory of probability and statistics using concepts and methods of the calculus. The Binomial and Poisson probability measures. The central limit theorem. Prerequisite: Math 265.

Math 413 Vector Analysis (3) w. Vector spaces, linear transformations, determinants, eigen-values and diagonalization of symmetric matrices, curl, divergence, gradient, multiple integrals, and the theorems of Green, Gauss, and Stokes. Prerequisite: Math 265.

Math 423 Advanced Calculus I (3) f. A rigorous review of elementary calculus: real number systems, continuous functions, functions of several variables, implicit functions. Prerequisite: Math 265 and 303 or concurrent registration in 303.

Math 433 Advanced Calculus II (3) w. Coordinate transformations, vectors, multiple integrals, Green's theorem, theory of integration, differential equations, Fourier Series. Emphasis on theory rather than applications. Prerequisite: Math 423.

Math 453 Numerical Analysis (3) f. Digital computer programming, finite differences, numerical integration, matrix computation, numerical solution of non-linear differential equations. Solution of many problems on a digital computer. Prerequisite: Concurrent registration in Math 323.

#### **PHYSICS**

PHYS 125 Fundamentals of Physical Science (5) f,w, sum. Includes the basic concepts in fundamentals of physics, chemistry, and other physical sciences. Lecture, laboratory and demonstration periods.

PHYS 155 Elementary College Physics I (5) f. Includes the study of mechanics, properties of matter, heat, wave motion and sound. This course does not count on a physics major. Prerequisites: Two units of high school algebra or college algebra 113.

PHYS 163 Elementary College Physics II (3) w. Includes a study of electricity, magnetism, light and topics from modern physics. Lecture, laboratory, demonstration and problem solving periods. This course does not count on a physics major. Prerequisites: Elementary College Physics I.

PHYS 255 General Physics I (5) f.w. Includes the study of mechanics, properties of matter, heat, wave motion and sound. The conservation laws of physics are emphasized. Lecture, laboratory and problem solving periods. Prerequisite: Calculus with Analytic Geometry I. Corequisite: Calculus with Analytic Geometry II.

PHYS 265 General Physics II (5) f,w. A study of electricity, magnetism, and light, with introductions to quantum properties of radiation and matter. Lecture, laboratory and problem solving periods. Prerequisite: General Physics I. Corequisite Calculus with Analytic Geometry III.

PHYS 273 Statics (3) w. The principles of mechanics as applied to problems of engineering in which the structures under consideration are in static equilibrium. Prerequisite: General Physics 255 and concurrent registration in Calculus with Analytic Geometry III.

PHYS 283 Fundamentals of Electrical Engineering (3) w. D. C. networks; branch currents, loop currents and nodal methods; Norton's and Thevenin's theorems; simple magnetic circuits; inductance, capacitance. Three lecture hours per week. Prerequisite: General Physics 265 or should be taken concurrently.

PHYS 323 Atomic and Nuclear Physics (3) w. A study of electrons, photo-electricity, relativity, quantum theory, positive rays, X-rays, elementary spectroscopy, radioactivity, atomic and nuclear structure, nuclear structure, nuclear energy, and fundamental particles. This course is designed for physics majors and engineering majors. Three hours of lecture per week. Prerequisite: Calculus with Analytic Geometry III and General Physics II.

PHYS 333 Analytical Mechanics (3) Kinematics and dynamics of particles and systems of particles including the harmonic oscillator, potential functions, conservative fields of force, central force motion, energy gravitation, rigid bodies and an introduction to the mechanics of continuous media. Three hours of lecture per week. Prerequisite: Calculus with Analytic Geometry III and General Physics II.

PHYS 343 Heat and Thermodynamics (3) Temperature, transfer of heat, laws of thermodynamics, entropy, enthalpy, reversibility and irreversibility, thermal properties of materials, low temperature physics, change of phase, and kinetic theory. Three hours of lecture per week. Prerequisite: Calculus with Analytic Geometry III and General Physics II.

PHYS 353 Electricity and Magnetism (3) Includes study of electrostatic forces, electric fields, electric potential, properties of conductors and dielectrics, magnetic fields, magnetic properties of matter, induced electromotive force, electric circuits, Maxwell's equations, and electromagnetic waves. Three hours of lecture per week. Prerequisite: Calculus with Analytic Geometry III and General Physics II.

PHYS 363 Physical Optics (3) Wave motion, Huygen's principle and theories of light are studied. Analytical study of polarization, reflection, refraction, diffraction, dispersion, crystal optics, and electromagnetic theory of light is included. Three hours of lecture per week. Prerequisite: Calculus with Analytic Geometry III and General Physics II.

PHYS 373 Intermediate Physics Laboratory (3) Experiments in mechanics, including mechanical wave phenomena, heat transfer, thermodynamic measurements, electrical measurements, precision calibration of electrical instruments, and geometrical and physical optics. Prerequisite: Calculus with Analytic Geometry III and General Physics II.

PHYS 383 Modern Physics Laboratory (3) Experiments in ionization potentials, photoelectric effect, spectroscopy, detection and properties of nuclear radiation, and measurements of the charge and mass of the electron. Prerequisite or Corequisite: Atomic and Nuclear Physics 323.

PHYS 423 Nuclear Physics (3) Radioactivity, nuclear stability, nuclear forces, nuclear structure, fission, fusion, dynamics of nuclear reactions, nuclear energy, neutron physics, particle accelerators and fundamental particles. Three hours of lecture per week. Prerequisite: Atomic and Nuclear Physics 323.

# DIVISION OF SOCIAL SCIENCE

#### HISTORY

HIST 104 History of the United Statec (5) f,w, sum. The foundations of American nationality, with emphasis on the European heritage, evolution of colonial and national institutions, social and intellectual problems and the war between the states; the post-Civil War period with emphasis on the development of labor, farm, and business organizations, the growth of the progressive tradition in politics and the United States' involvement in contemporary world affairs.

HIST 200 Western Civilization (5) f,w. Development of Western ideas and institutions from the origin of civilization in the ancient Near East to the present.

HIST 203 Modern European History 1500 to 1815 (3) f. The History of Europe from the Renaissance and Reformation to Waterloo, with emphasis upon the origin and development of modern national states.

HIST 204 Modern European History from 1815 (3) w. The history of Europe from Waterloo to the present with emphais upon the origin and development of international conflict in the 20th century.

HIST 300 Social and Intellectual History of the United States to 1877 (3) f. Thoughts and ideas that have determined United States' intellectual, cultural, and social life to 1877.

HIST 301 Social and Intellectual History of the United States from 1877 to Present (3) w. Thoughts and ideas that have determined United States' intellectual cultural and social life from 1877 to the present.

HIST 313 Mediterranean World (3) w. Growth and conflict in Mediterranean Europe and adjoining regions during the late medieval, Renaissance and Reformation periods.

HIST 314 Ancient History (3) f. The institutional and cultural development of ancient lands in and near the Mediterranean.

HIST 315 Medieval History (3) w. European development from the fall of Rome to the age of exploration.

HIST 318 Diplomatic History of the United States (3) w. History of United States foreign policy, 1789 to present.

HIST 319 Economic History of the United States (3) f. Development of the American economy since the Civil War.

HIST 402 Readings in History (1-3) f,w, sum. Individual studies in particular areas of history.

HIST 404 European Intellectual History to 1870 (3) f. The foundations of modern thought in Europe from the enlightenment to the mid-19th century.

HIST 405 European Intellectual History since 1870 (3) f. Trends in European thinking since 1870.

HIST 408 History of England (3) f. A study of the rise and development of the English people and their institutions.

HIST 412 History of a Modern Nation (3) w. Political, social, economic, and intellectual survey of a country. (Country may be changed from year to year).

HIST 416 Totalitarianism (3) f. Historical development of societies dominated by one group that maintains absolute control by illegalizing all other control groups.

HIST 418 English Legal and Constitutional History (3) f. A study of the orgin and growth of British institutions in relation to political and economic conditions. Prerequisite: 408.

HIST 420 Far Eastern History (5) w. A survey of the history of Asia with emphasis on the development of modern China, Japan, and India.

#### POLITICAL SCIENCE

PoSc 120 United States Government (3) f,w, sum. Studies the theories, objectives, problems, and organization of United States government.

PoSc 128 United Nations (1) f. Examines the structure, capabilities, values and limitations of the United Nations.

PoSc 220 International Relations (3) f. Contemporary International affairs, control of national foreign policies and competition and cooperation in legal, political, economic and social fields.

PoSc 222 State and Local Government (2) f,w, sum. The general structure, operation and problems of state and local governments.

PoSc 224 Current World Affairs (3) w. Examines the current world problems, their causes, results and possible solutions.

PoSc 318 Political Parties (3) f. A study of the development, organization, and operation of political parties in the United States.

PoSc 320 American Presidency (3) w. Explores the various roles of the President of the United States and the importance of the office.

PoSc 324 Comparative Government (3) w. An examination of the governments and politics of major countries in comparison with one another and with the United States.

PoSc 328 Political Theory (3) w. An examination of the political ideas which have developed the United States government.

PoSc 332 Municipal Government (3) f. Studies the structure, legal

status, functions and organization of municipal government.

PoSc 420 Totalitarianism (3) f. An examination of non-democratic governments and political systems in comparison with one another and with the United States.

PoSc 422 English Legal and Constitutional History (3) w. The development of English political and legal institutions with emphasis on the Anglo-Norman background, the rise of parliament, Tudor absolutism, the Stuart period of revolution, development of the Cabinet, nineteenth century democratization, and evaluations resulting from the crises of the twentieth century.

PoSc 424 Constitutional Law (3) w. The principles, nature, and meaning of the U.S. Constitution as determined by Supreme Court rulings; includes an analysis of the national court system, judicial review, federalism, separation of powers, commerce powers, taxing powers, contract clause, due process clause, equal protection clause, and civil liberties.

PoSc 428 Public Administration (3) f. The concepts and practices of organizations and management in the executive departments of national, state, and local government; includes an analysis of bureaucracy, administrative theory, budgeting, personnel, and administrative leadership.

PoSc 432 Readings in Political Science (1.3) f,w, sum. The individual study in a particular area of political science.

## SOCIOLOGY — PHILOSOPHY — ANTROPOLOGY

Soc 140 Introduction to Sociology (3) f,w, sum. This course introduces the systematic study of society. Emphasis is placed upon the major concepts of sociology and the scientific point of view in dealing with social phenomena.

Soc 144 Family (3) f. Development of family relationships throughout the life cycle. Attention is given to courtship and engagement as well as factors promoting satisfactory family relationships.

Soc. 152 Introduction to Anthropology (3) w. Brief attention to physical anthropology; major concern is with cultural anthropology. Comparisons between "preliterate" and "literate" cultures.

Soc 240 Social Work (3) w. The historical development, philosophy, and theory forming the basis for the professional practice of social work; personal and educational requirements for the career opportunities. Prerequisite: 140.

Soc 248 Social Problems (2) w. Study of the "problem" areas and social "issues" in modern society. Considers personality adjustment, strains, family problems, population problems, forms of deviancy, and group conflict. The latter part of the course explores "solutions" and social engineering programs.

Phil 280 Introduction to Philosophy (3) f. Comparative survey of major types of philosophy, and of representative problems in philosophy.

Phil 284 Ethics (3) w. Exploration of the problem of value, personal moral attitudes and standards, comparative survey of major ethical systems, and evaluation of the chief ethical struggles in contemporary society.

Soc. 320 Sociology of Religion (3) f. Study of religion as a social institution. Comparative religions considered briefly. Major attention to the relationships of religion to other social institutions in contemporary society.

Soc 340 Social Stratification (3) f. Analysis of the sociological processes in relation to social situations and interpersonal behavior. Study of factors which account for differences in influence, power, and social prestige. Prerequisite: Sociology 140 or permission of the instructor.

Soc 344 Criminology (3) w. Examines the agencies and institutions which deal with offenders, Particular attention is given to treatment of the offender, as well as to programs of crime prevention. Prerequisite: Sociology 140.

Soc 442 The Community—Rural and Urban (3) w. Survey of the operation of social processes in groups which share common bonds of territory and cultural interests. Limited attention to the international community. Major attention to the American scene, including the regional, rural, urban, ethnic, and status communities.

Soc 444 Juvenile Delinquency (3) Consideration is given to theories of crime causation and methods of punishments as a background for the study of juvenile delinquency. Emphasis is placed upon factors of causation as revealed through personal family and community situations conditioning delinquent behavior; analysis of concrete cases of juvenile delinquency; and examinations of current methods of dealing with juvenile offenders and programs for the prevention of delinquency. Prerequisite: Sociology 140.

#### **GEOGRAPHY**

Geo 220 Regions and Nations (3) f. A survey of the peoples of the earth and how their activities are influenced by climate, topography and natural resources.

Geo 225 Geography of the United States (3) f. Emphasis on land forms, resources and climate as related to peoples of various geographic regions of the United States.

- Geo 227 European Geography (3) w. A survey of Europe's natural and cultural regions and their influence upon man with a special emphasis upon continental and world relationships.
- Geo 230 Latin American Geography (3) w. Stress will be placed upon natural economic and cultural aspects of individual countries, their growing importance in world affairs and their relation to Pan-Americanism.
- Geo 335 Geography of the Soviet Union (3) w. The physical, cultural and regional geography of the Soviet Union with especial emphasis upon expansion into Soviet Asia.
- Geo 340 Geography of Africa (3) f. A description of its natural regions, the importance of climatic zones upon its development; the major cultural divisions; European imperialism and its effects upon the emerging African nations today.